

PROPOSED REGULATION OF THE STATE ENGINEER

LCB File No. R044-14

August 14, 2014

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

AUTHORITY: §§1-8, 11, 12, 17, 31-34, 38-40 and 48-50, NRS 534.020 and 534.110; §§9, 10, 13, 15, 16, 21-23, 26, 28 and 29, NRS 534.020, 534.110 and 534.140; §14, NRS 534.020, 534.110, 534.140 and 534.160; §§18 and 19, NRS 534.020, 534.050, 534.110 and 534.140; §20, NRS 534.020, 534.110, 534.140 and 534.180; §§24, 25 and 35, NRS 534.020, 534.110, 534.140 and 534.170; §§27, 30, 36 and 37, NRS 534.020, 534.060, 534.110 and 534.140; §§41-46, NRS 534.020, 534.050 and 534.110; §47, NRS 534.020, 534.060 and 534.110.

A REGULATION relating to wells; revising various provisions governing the licensure and continuing education of well drillers; revising provisions governing the duties of well drillers; making various changes regarding the construction, drilling and plugging of wells and monitoring wells; revising provisions governing the waiver of certain requirements governing the drilling of wells; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Existing law authorizes the State Engineer to prescribe regulations for the protection of groundwater, including regulations governing well drilling. (NRS 534.020, 534.110)

Section 5 of this regulation provides that certain waivers granted by the State Engineer do not extend to the well driller the right of ingress or egress across and upon public, private or corporate lands. **Sections 6 and 7** of this regulation revise the definitions of “bentonite grout” and “exploratory well.” **Section 8** of this regulation clarifies that the synonymous defined terms “well drilling” and “drilling a well” include the reconditioning and rehabilitation of wells. Under existing regulations, “reconditioning” is defined as “the deepening, reaming, casing, recasing, perforating, re-perforating, installing of liner pipe, packers and seals or any other significant change in the design or construction of a water well.” (NAC 534.188) Conforming changes are made throughout this regulation to delete “recondition” where the term “drilling” is also used and to delete “deepen” where “recondition” is also used. **Section 3** of this regulation newly defines “rehabilitation” as the process of revitalizing an existing water well by various methods that do not cause a significant change in the design or construction of the well.

Sections 9-12 of this regulation revise certain requirements relating to an application for a well-drilling license. **Section 9** provides that an application for a well-drilling license may only be submitted in person or by mail, and therefore not electronically. **Section 9** also makes the application valid for 1 year after submission instead of after the making of three attempts to pass each section of the examination for licensure. **Section 10** specifies that the 2 years of experience

as a well driller required for applying for a well-drilling license must be full-time and obtained under the supervision of a licensed well driller in good standing. **Section 10** also makes several changes regarding the examination for licensure as a well driller. First, **section 10** increases the passing score required on the written test portion of the exam from 70 to 80 percent, and a conforming change is made in **section 12**. Second, **section 10** revises the organization of the examination from three sections (written, practical and oral) to two sections (written and oral) by combining the written portion with the practical portion that tests the applicant's ability to provide a public land survey description of the location of a well and is scored on a pass or fail basis. Third, **section 10** provides that an application will be denied if the applicant fails to pass the written or oral examination after two consecutive attempts. Finally, **section 10** requires an applicant to provide at least 3 working days' notice if the applicant cannot appear for the examination for licensure. **Section 11** adds as a requirement of the oral examination that an applicant for licensure have sufficient knowledge of the minimum standards in chapter 534 of NAC for the development and testing of wells. **Section 2** of this regulation defines "development of a well" as the process of cleaning out materials introduced during the drilling process before putting a well into service.

Sections 13-15 of this regulation revise requirements relating to the renewal of a well-drilling license. **Section 13** requires an applicant for renewal of a well-drilling license to submit the renewal application only in person or by mail, and therefore not electronically, by the submittal deadline that is moved from **section 14**. **Section 13** also requires, as part of the continuing education required for renewal of a well-drilling license, that an applicant complete specific courses at least once within two consecutive renewal periods. Existing regulations require a well driller to submit to the Division of Water Resources of the State Department of Conservation and Natural Resources documentation of credit units of continuing education to the Division with an application to renew a well-drilling license. (NAC 534.2923) **Section 15** removes the requirements that a well driller maintain documentation of those credit units of continuing education for 3 years after completion of the units. **Section 15** also removes the requirement that the Division request that the Nevada Groundwater Association develop and implement a program for continuing education.

Under existing regulations, to reinstate his or her license, a well driller whose license has been expired for more than 1 year or whose license has been suspended or revoked is required to: (1) file a new application; (2) pass an examination; and (3) reduce the number of demerit points the well driller has accumulated to 74 or less. (NAC 534.293) **Section 16** of this regulation requires such a well driller to reduce the number of demerit points to zero. **Section 16** also imposes the same reinstatement requirements on a well driller whose license has been expired for less than a year but allows such a well driller to petition for and receive a waiver from the Division of the examination requirement. **Section 17** of this regulation eliminates a license to drill wells for projects of the Federal Government from the categories of restricted well-drilling licenses that may be issued. **Section 17** also provides a procedure for the modification of the scope of a restricted well-drilling license. **Section 50** of this regulation eliminates the authority of the State Engineer to issue a temporary well-drilling license to an employee of a drilling contractor in certain circumstances.

Sections 18-24 and 26-47 of this regulation revise provisions relating to the drilling and plugging of wells. **Sections 18 and 19** revise the categories of wells for which a waiver is

required to track the statutory language in NRS 534.050 and, in conjunction with **section 35**, now require a waiver for a monitoring well required by a governmental agency. **Section 20** revises the procedures for wells drilled for domestic use.

Under existing regulations, a well driller is required to notify the Division before drilling or plugging a well by submitting to the Division a notice of intent to drill. (NAC 534.320) **Section 21** makes an exception to this requirement by not requiring the submission of a notice of intent to drill for the rehabilitation of an existing well. **Section 21** also requires that the notice of intent to drill be accompanied by the new filing fee of \$25 that was authorized during the 2013 Legislative Session. (NRS 533.435) Finally, **section 21** prohibits a well driller from setting up a well rig or commencing drilling or plugging a well until the notice of intent to drill is approved by the Division.

Existing regulations require a licensed well driller to be present at a well-drilling site when the drill rig is in operation and when any activity involving the construction or plugging of the well is conducted. (NAC 534.330) **Section 23** extends this requirement to when the reconditioning or rehabilitation of a well is occurring and also authorizes the Division to order the cessation of a drilling operation and conduct an investigation if the Division determines that drilling operations occurred during any period in which a licensed well driller was not present at the drilling site. **Section 23** also requires the licensed well driller to have the documentation of the approval of the notice of intent to drill the well in his or her possession at the well-drilling site and produce the documentation upon the request of a representative of the Division.

Under existing law and regulations, a well driller is required to submit a log and record of work, known as a Well Driller's Report, to the State Engineer within 30 days after the completion of the well. (NRS 534.170; NAC 534.340) **Section 4** of this regulation provides a definition of "Well Driller's Report." **Section 24** makes an exception to this requirement by not requiring the submission of a Well Driller's Report for the rehabilitation of an existing well. **Section 24** also revises the information that must be included in a Well Driller's Report. **Section 25** of this regulation revises the procedure relating to the late submittal of corrections to a Well Driller's Report. **Section 14** provides that the State Engineer will consider the failure to submit or the failure to submit in a timely manner by the well driller any corrections to a Well Driller's Report in determining whether an applicant has an unacceptable history of noncompliance with chapters 534 of NRS and NAC.

Sections 24 and 41 limit the duration of any testing of a well to 72 hours, unless a longer period is approved by the Division. **Section 28** revises the requirements regarding the additives that may be used in drilling a well. **Section 29** requires that before commencing the construction of a new water well, a well driller: (1) investigate the drilling conditions, the geology of potential aquifers and overlying materials in the area in which the new water well is to be located by examining Well Driller's Reports for existing wells in the area; and (2) identify certain water-related problems. **Section 31** revises the procedures for plugging a well other than a monitoring well, and **section 39** revises the procedure for plugging a monitoring well.

Under existing regulations, a request for a waiver from certain requirements must be accompanied by an affidavit which indicates the person who will be responsible for the plugging of a well upon abandonment and which is signed by the person or authorized representative of

the company that, for private lands, is the owner of record of the property or, for public lands, that has the appropriate authorization to use the public lands. (NAC 534.449) **Sections 41-48** of this regulation require that the affidavit be made only by the person who will be responsible for plugging the well upon abandonment.

Section. 1. Chapter 534 of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 5, inclusive, of this regulation.

Sec. 2. *“Development of a well” means the process of cleaning out materials introduced during the drilling process before putting a well into service.*

Sec. 3. *“Rehabilitation” means the process of revitalizing an existing well by various methods that do not cause a significant change in the design or construction of the well, including, without limitation, chemical treatment, brush cleaning, surging and high-pressure jetting.*

Sec. 4. *“Well Driller’s Report” means the log and record of work for a drilled well required to be submitted to the State Engineer pursuant to NRS 534.170 and NAC 534.340.*

Sec. 5. *A waiver granted by the State Engineer pursuant to NAC 534.440 to 534.444, inclusive, and 534.448 does not extend to the well driller the right of ingress or egress across and upon public, private or corporate lands. To obtain such a right, the person who requested the waiver must obtain written authorization from the owner of the land to access the project area.*

Sec. 6. NAC 534.042 is hereby amended to read as follows:

534.042 “Bentonite grout” means a commercially manufactured product consisting of the sodium montmorillonite that, when mixed with water pursuant to the specifications recommended by the manufacturer, is specifically designed by the manufacturer to seal and plug wells and boreholes and:

1. Consists of not more than ~~84.6~~ 80 percent water and not less than ~~15.4~~ 20 percent sodium bentonite by weight of water, except that additional additives may increase the solids ratio above and beyond the minimum ~~15.4~~ 20 percent sodium bentonite;

2. ~~Has an API standard filter press fluid loss of less than 9.0 cubic centimeters;~~
~~3.~~ Is easily hydrated when mixed with fresh water in the ratio of ~~33~~ 24 gallons for every 50-pound bag of bentonite grout;

~~4.~~ 3. Has hydraulic conductivity or permeability values of 10^{-7} centimeters per second or less; and

~~5.~~ 4. Has a fluid weight of not less than ~~9.2~~ 9.4 pounds per gallon.

Sec. 7. NAC 534.120 is hereby amended to read as follows:

534.120 “Exploratory well” means a *hole or* well constructed ~~pursuant to paragraph (a) of subsection 2 of NRS 534.050~~ to determine the availability , *quantity or quality* of water or whether an aquifer is capable of transmitting water to a well.

Sec. 8. NAC 534.245 is hereby amended to read as follows:

534.245 1. “Well drilling” and “drilling a well” have the meaning ascribed to them in NRS 534.0175.

2. *As used in NRS 534.0175, the State Engineer interprets “well drilling” and “drilling a well” to include, without limitation, the reconditioning and rehabilitation of a well.*

Sec. 9. NAC 534.280 is hereby amended to read as follows:

534.280 An application for a well-drilling license must be submitted to the Division ~~H~~ *in person or by mail*. The application:

1. Must be completed and signed by the applicant on a form provided by the Division;
2. Must be accompanied by the fee prescribed in NRS 534.140; and

3. Is valid ~~{,}~~ for ~~{each section of the examination that is required pursuant to NAC 534.282:~~
~~—(a) For the first three dates on which that section of the examination is given which immediately follow the date on which the application is processed by the Division; or~~
~~—(b) For the first three dates on which a section of the examination is offered following the successful completion of the previous section of the examination.}~~ *1 year after the date of submission of the application.*

Sec. 10. NAC 534.282 is hereby amended to read as follows:

534.282 1. An applicant for a well-drilling license must:

- (a) Be at least 18 years of age;
- (b) Be a citizen of the United States, or be lawfully entitled to remain and work in the United States;
- (c) Submit an application and the fee pursuant to NAC 534.280;
- (d) Demonstrate a good working knowledge of:
 - (1) Standard drilling practice;
 - (2) The regulations of the State Engineer and applicable laws relating to well drilling; and
 - (3) The method by which land is described by public land survey;
- (e) Have at least 2 years of *full-time* experience *under the supervision of a licensed well driller in good standing with the State Engineer* as a *water* well driller *that is* determined to be appropriate by the State Engineer for the license for which the applicant applies;
- (f) Have at least four professional references determined to be satisfactory and appropriate by the State Engineer for the license for which the applicant applies; and
- (g) Pass an examination, consisting of the following ~~{three}~~ sections:
 - (1) A written examination *which includes:*

(I) A written test consisting of questions on which the applicant must obtain a passing score of at least ~~{70}~~ **80** percent;

~~{(2) A section which requires the applicant}~~ **and**

(II) A test of the applicant's ability to use a standard 7.5 minute topographic map from the United States Geological Survey to provide the public land survey description of the location of a well ~~{}~~, **which will be scored on a pass or fail basis**; and

~~{(3)}~~ **(2)** An oral examination conducted by the Board.

2. The State Engineer ~~{may}~~ **will** deny an applicant a license if the applicant:

(a) Fails to notify the Division **at least 3 working days before the scheduled examination date** that he or she cannot appear for the examination as instructed by a notice to appear before the State Engineer or the Board; ~~{or}~~

(b) Fails to pass all ~~{three}~~ sections of the examination described in paragraph (g) of subsection 1 within the period for which the application is valid pursuant to NAC 534.280 ~~{}~~; **or**

(c) Fails to pass any section of the examination described in paragraph (g) of subsection 1 after two consecutive attempts.

Sec. 11. NAC 534.286 is hereby amended to read as follows:

534.286 Except as otherwise provided in NAC 534.288, the Board shall conduct the oral examination section of the examination for each applicant for a well-drilling license. The oral examination section of the examination must be conducted to determine the sufficiency of the applicant's:

1. Knowledge of the provisions of this chapter and chapter 534 of NRS, including, without limitation, knowledge of the minimum standards established in this chapter for the construction, ~~{and}~~ plugging, **development or testing** of wells;

2. Qualifications and experience;
3. Proficiency in the operating procedures and construction methods associated with the various types of drilling rigs used for well drilling; and
4. Ability to resolve problems that may arise during the construction, ~~for~~ plugging, *development or testing* of a well.

Sec. 12. NAC 534.288 is hereby amended to read as follows:

534.288 The Board is not required to conduct the oral examination section of the examination for an applicant for a well-drilling license who:

1. Receives a score of less than ~~70~~ 80 percent on the written ~~examination section~~ *test portion* of the *written* examination; or
2. Is unable to demonstrate his or her ability to locate a well by public land survey on a topographic map.

Sec. 13. NAC 534.2923 is hereby amended to read as follows:

534.2923 ~~1.1~~ A well driller may renew his or her well-drilling license by submitting a renewal application to the Division ~~1.1~~ *in person or by mail so that the Division receives the application not later than June 15*. The renewal application must:

- ~~(a)~~ 1. Be completed and signed by the well driller on a form provided by the Division;
- ~~(b)~~ 2. Be accompanied by the renewal fee prescribed in NRS 534.140; and
- ~~(c)~~ 3. Except as otherwise provided in ~~subsections 5 and 6~~ *subsection 4* of NAC 534.2927, include documentation satisfactory to the Division that the applicant has completed eight credit units of continuing education within the previous year beginning July 1 and ending June 30. At least once within two consecutive renewal periods, the units of continuing education

completed by an applicant must include the *successful* completion of ~~[a course in the statutes and regulations governing well drilling in this State.~~

~~—2. If the State Engineer has notified a well driller during the previous year that the well driller has violated a provision of this chapter or chapter 534 of NRS related to welding involving work that does not comply with the construction standards for wells, the well driller must obtain a certificate as a certified welder from the American Welding Society or another similar organization approved by the Division and include the certificate with the well driller’s application for renewal of his or her license.]~~ *the following courses offered by the Division:*

(a) “Nevada Well Drilling Regulations and Statutes”; and

(b) “Well Drilling Forms: How to Properly Complete a Well Driller’s Report, Notice of Intent Card, Affidavit of Intent to Abandon and Waivers.”

Sec. 14. NAC 534.2925 is hereby amended to read as follows:

534.2925 1. The Division shall process each application submitted for renewal of a well-drilling license pursuant to NAC 534.2923 in the order in which the applications are received by the Division. ~~[A well driller must submit his or her application for renewal to the Division so that the Division receives the application not later than June 15 to ensure that the license will remain in force and continue without interruption.]~~ If the State Engineer determines that an application is complete and the applicant is qualified, the Division shall renew the license for the period ending on June 30 of the year after approval of the renewal.

2. The Division shall not renew a license if the State Engineer determines, upon investigation and after a hearing held upon at least 15 days’ notice sent by registered or certified mail to the licensed well driller, that the well driller:

(a) Has not submitted all required notices of intent *to drill* to the Division as required by NAC 534.320;

(b) Has not furnished a copy of the ~~log and record of work~~ *Well Driller's Report* for every well drilled to the State Engineer ~~as required by~~ *pursuant to* NRS 534.170 ~~;~~ *and NAC 534.340;*

(c) Has not complied with all orders requiring the repair or plugging of improperly constructed wells;

(d) Is not otherwise in compliance with this chapter or chapter 534 of NRS; or

(e) Has accumulated 100 demerit points or more against his or her license.

3. If the State Engineer determines, after consultation with the Board, that a well driller has an unacceptable history of noncompliance with this chapter and chapter 534 of NRS, the Division may deny renewal, refuse renewal for a specified time, or renew the license of the well driller with conditions that the State Engineer considers appropriate. In making this determination, the State Engineer ~~may~~ *will* consider ~~the~~ :

(a) The actions of the well driller within the 5 years immediately preceding the date on which the renewal application is received by the Division with regard to his or her well-drilling license or other permits issued by the State Engineer pursuant to this chapter or chapter 534 of NRS.

(b) The failure to submit or the failure to submit in a timely manner by the well driller any corrections to a Well Driller's Report required pursuant to NAC 534.345.

Sec. 15. NAC 534.2927 is hereby amended to read as follows:

534.2927 1. A credit unit of continuing education is earned for each hour the holder of a well-drilling license attends a workshop, seminar or course or participates in any other type of educational activity related to well drilling or related subjects approved by the Division. Such

educational activities may include, without limitation, the completion of college courses or Internet courses, compiling and instructing courses approved by the Division, active participation on the board of a professional organization and authoring appropriate publications.

2. ~~{A well driller must maintain documentation verifying that he or she has completed the number of credit units of continuing education required by NAC 534.2923.}~~ Documentation of completion of continuing education which is satisfactory to the Division includes, without limitation:

(a) A log, on a form provided by the ~~{State Engineer,}~~ **Division**, indicating the type of educational activity claimed, the sponsoring organization, the duration of the course or activity, the name of the instructor and the number of credit units; and

(b) Documents providing evidence of attendance at or participation in an educational activity, including, without limitation, a certificate of completion.

3. ~~{A well driller shall maintain the documentation required pursuant to subsection 2 for a period of 3 years after the date of completion of the credit units of continuing education and shall make the documentation available for review by the State Engineer at the request of the Division. —4.}~~ Except as otherwise provided in subsection ~~{5 or 6,}~~ **4**, the Division shall deny the

renewal of a license if, at the time of renewal, the well driller is unable to provide documentation of completion of the number of credit units of continuing education required by NAC 534.2923.

~~{5.}~~ **4.** The Division may exempt a well driller from all or part of the number of credit units of continuing education required by NAC 534.2923 if the well driller:

(a) Served on active duty in the Armed Forces of the United States for 120 consecutive days or more during the licensing period immediately preceding the application for renewal;

(b) Was prevented from earning the number of credit units of continuing education required by NAC 534.2923 because of a physical disability, serious illness or other extenuating circumstances; or

(c) Is within the first renewal period after the well driller has applied or reapplied for his or her license . ~~and has passed all three parts of the examination.~~

~~6.—A well driller who has allowed his or her license to expire or otherwise become of no effect is exempt from the requirements of continuing education set forth in NAC 534.2923 unless the well driller files an application for renewal of the license within 1 year after the license expired or otherwise became of no effect.~~

~~7.]~~ 5. A well driller who is not a resident of this State is subject to the same requirements of continuing education as a well driller who is a resident of this State.

~~8.—The Division shall request that the Nevada Groundwater Association:~~

~~—(a) Develop a program for continuing education for review and, if appropriate, approval by the Division;~~

~~—(b) Implement a program that is developed and approved pursuant to paragraph (a);~~

~~—(c) Provide recommendations to the Division concerning:~~

~~——(1) The amount and nature of continuing education that is necessary to maintain and improve the competency of a well driller; and~~

~~——(2) The number of credit units of continuing education that should be assigned to specific educational activities; and~~

~~—(d) Encourage other associations for well drillers, related professional organizations and educational institutions to make additional educational activities available for well drillers.~~

~~—9.— If the Nevada Groundwater Association does not submit a program for continuing education to the Division pursuant to subsection 8, or if the program submitted pursuant to subsection 8 is not approved by the Division, the Division may request that the Board or another established professional organization approved by the State Engineer:~~

~~—(a) Develop a program for continuing education for review and, if appropriate, approval by the Division; and~~

~~—(b) Implement a program that is developed and approved pursuant to paragraph (a).~~

~~—10.] 6.~~ The Division shall review each educational activity submitted to the Division to satisfy the continuing education requirements set forth in NAC 534.2923 to determine the number of credit units of continuing education, if any, to assign to the educational activity.

~~{11.] 7.~~ The Division is not obligated to provide credit units of continuing education for a course that was completed before the Division has approved the course.

Sec. 16. NAC 534.293 is hereby amended to read as follows:

534.293 ~~{A}~~ *To reinstate a license, a* well driller whose license has been ~~{expired}~~ :

1. Expired for 1 year or less must:

(a) File a new application with the fee required by NRS 534.140;

(b) Pass the examination required by NAC 534.282 or petition the Division for and receive from the Division a waiver of the requirement to pass the examination; and

(c) Reduce the number of demerit points the well driller has accumulated against his or her license to zero.

2. Expired for more than 1 year or ~~{whose license has been}~~ suspended or revoked must:

~~{1.}~~ *(a) File a new application with the fee required by NRS 534.140 ~~{to obtain a license};~~*
~~2.];~~

(b) Pass the examination required by NAC 534.282; and

~~13.1~~ (c) Reduce the number of demerit points the well driller has accumulated against his or her license to ~~74 or less.~~ *zero.*

Sec. 17. NAC 534.294 is hereby amended to read as follows:

534.294 1. A well-drilling license authorizes the licensee to drill ~~1, recondition~~ or plug the following types of wells:

- (a) Water wells;
- (b) Monitoring wells; and
- (c) Geothermal wells.

2. The State Engineer may issue restricted well-drilling licenses that limit a well driller to a class of work or type of drilling rig, or both, for which the Board has determined the driller is qualified. The following restricted well-drilling licenses may be issued:

- (a) A monitoring well-drilling license;
- (b) A geothermal well-drilling license; *and*
- (c) ~~A license to drill wells for projects of the Federal Government; and~~
- ~~(d)~~ Any other class of well-drilling license determined to be appropriate by the Board and the State Engineer.

3. If a well driller wishes to modify the scope of his or her restricted well-drilling license, the well driller may submit a written request to the Division to appear before the Board for further examination.

Sec. 18. NAC 534.300 is hereby amended to read as follows:

534.300 1. Except as otherwise provided in *subsection 6 and* NAC 534.315, a well driller shall not drill a water well within a groundwater basin designated by the State Engineer until the

well driller determines that a permit to appropriate the groundwater has been issued pursuant to NRS 534.050.

2. Except as otherwise provided in subsections 3 , ~~and 5,~~ **5 and 6**, a water well may be drilled to replace an existing well if a valid permit, waiver or certificate of water right exists for the well to be replaced.

3. If continued use will not be made of the existing well, the existing well must be plugged as required by NAC 534.420 at the time the replacement well is drilled . ~~unless the owner of the well first obtains a waiver from the requirement that the well be plugged pursuant to subsection 7 or 8 of NRS 534.060 and NAC 534.449.~~ If continued use will be made of the existing **well or the well owner does not want to plug the existing** well, a permit must be issued for the replacement well before any drilling is commenced.

4. The replacement well must not be drilled more than 300 feet from the location of the existing point of diversion described in the permit , **waiver or certificate** and may not be moved outside of the 40-acre subdivision described in the permit, waiver or certificate. Drilling must not be suspended without completing the replacement well or plugging the original well unless approved by the Division.

5. If water service is available from an entity, including, without limitation, a public utility, a water district or a municipality presently engaged in furnishing water to the inhabitants of an area, a well for temporary use for which a revocable permit was granted pursuant to NRS 534.120 may not be drilled ~~deepened, reconditioned~~ or replaced unless, pursuant to NAC 534.450, a waiver from the provisions of this section is first obtained from the Division.

6. In basins designated by the State Engineer, a waiver is required for any ~~water~~ well:

(a) That does not comply with the requirements for construction prescribed in this chapter;

- (b) The water appropriated from which will be used in constructing a highway or exploring for oil, gas, minerals or geothermal resources; ~~for~~
- (c) That may be used as a monitoring well ~~{that is not required by a governmental agency.}~~ ;
- (d) That may be used as an exploratory well; or*
- (e) That is located in a shallow groundwater system for removing water for the purpose of alleviating potential hazards to persons and property resulting from the rise of groundwater caused by secondary recharge.*

Sec. 19. NAC 534.310 is hereby amended to read as follows:

534.310 1. Except as otherwise provided in *subsection 4 and* NAC 534.315:

(a) In basins which have not been designated by the State Engineer, a person who drills a well before receiving a permit to appropriate water does so at the risk that a permit to appropriate water cannot be obtained; and

(b) A person shall not use water from a well until a permit or waiver has been obtained pursuant to NRS 534.050.

2. In basins which have not been designated by the State Engineer, the well driller may proceed to drill ~~{and perform tests on}~~ a well whether or not the owner of the property has a permit to appropriate water.

3. A replacement well must not be drilled more than 300 feet from the location of the existing point of diversion described in the permit , *waiver or certificate* and may not be moved outside of the 40-acre subdivision described in the permit, waiver or certificate. Drilling must not be suspended without completing the replacement well ~~for~~ *and* plugging the original well unless approved by the Division.

4. In basins which have not been designated by the State Engineer, a waiver is required *before any diversion of water may be made* for any ~~{water}~~ well:
- (a) That does not comply with the requirements for construction prescribed in this chapter;
 - (b) The water appropriated from which will be used in constructing a highway or exploring for oil, gas, minerals or geothermal resources; ~~{or}~~
 - (c) That may be used as a monitoring well ~~{that is not required by a governmental agency.}~~ ;
 - (d) That may be used as an exploratory well; or*
 - (e) That is located in a shallow groundwater system for removing water for the purpose of alleviating potential hazards to persons and property resulting from the rise of groundwater caused by secondary recharge.*

Sec. 20. NAC 534.315 is hereby amended to read as follows:

- 534.315 1. Except as otherwise provided in subsection ~~{10,}~~ **8**, permits to appropriate groundwater are not required for the drilling of wells for domestic use.
2. A well driller shall take into account the normal annual fluctuations in the demand for water of an area and, if the well is in a developed area, some annual drop in static water level.
3. Water may not be diverted from more than one well for domestic use in one single-family residence.
4. A well drilled for domestic use only must have a casing size not larger than 8.625 inches in diameter.
5. ~~{If}~~ *Except as otherwise provided in subsection 7, if* a well drilled for domestic use cannot be reconditioned, a replacement well may be drilled if the original well is plugged as required by NAC 534.420 before the equipment used for well drilling is moved from the drilling site.

6. Except as otherwise provided in subsection 7, a well may be drilled for domestic use if not more than ~~1,800-gallons~~ *2 acre-feet* of water per ~~day~~ *year* is diverted from the well for use by a single-family household, including a residence with a lawn, garden and domestic animals.

7. If water service is available from an entity, including, without limitation, a public utility, a water district or a municipality presently engaged in furnishing water to the inhabitants of the area, a well for domestic use may not be drilled, *including, without limitation,* deepened ~~or~~ *or* reconditioned, or replaced unless a waiver from the provisions of this section is first obtained from the Division.

8. ~~If the State Engineer has pursuant to subsection 2 of NRS 534.180 designated a groundwater basin or portion thereof as a basin in which the registration of a well drilled for the development and use of underground water for domestic purposes is required, a well drilled for domestic use in that basin or portion thereof must be plugged as required by NAC 534.420 if:~~

- ~~—(a) The conditions set forth in subsection 3 of NRS 534.180 are satisfied; and~~
- ~~—(b) The State Engineer sends a notice to the owner of the well by certified mail, return receipt requested, indicating that the well must be plugged.~~

~~→ The well must be plugged within 1 year after the owner of the well receives the notice from the State Engineer.~~

~~—9.— If the State Engineer has not pursuant to subsection 2 of NRS 534.180 designated a groundwater basin or portion thereof as a basin in which the registration of a well drilled for the development and use of underground water for domestic purposes is required, a well drilled for domestic use in that basin or portion thereof must be plugged as required by NAC 534.420 if:~~

- ~~—(a) The well must be plugged pursuant to subsection 3 of NAC 534.427; and~~

~~—(b) The State Engineer sends a notice to the owner of the well by certified mail, return receipt requested, indicating that the well must be plugged.~~

~~→ The well must be plugged within 1 year after the owner of the well receives the notice from the State Engineer.~~

~~—10.1~~ A permit must be obtained from the Division if:

(a) More than ~~{1,800 gallons}~~ **2 acre-feet** of water per ~~{day are}~~ **year is** diverted from a water well ~~{;} for domestic use;~~ or

(b) Water is used for purposes other than domestic use.

Sec. 21. NAC 534.320 is hereby amended to read as follows:

534.320 1. ~~{A}~~ **Except as otherwise provided in subsection 2, a** well driller shall ~~{notify}~~ **not set up a well rig or commence drilling or plugging a well until the well driller has submitted to** the Division ~~{before drilling, reconditioning or plugging a well by submitting}~~ a notice of intent to drill ~~{;} and the Division has approved the notice of intent to drill.~~

2. The notice **of intent to drill** must be submitted for work on an exploratory, water or monitoring well. A well driller shall notify the Division before drilling a geothermal well **by submitting a notice of intent to drill** if a permit to appropriate water is required pursuant to NRS 534.050.

~~{2.}~~ **Submission of a notice of intent to drill is not required for the rehabilitation of an existing well.**

3. The notice of intent to drill submitted pursuant to subsection 1 must give the name of the person for whom the work is being performed, the location of the well by public land survey, the lot number, block number and county assessor's parcel number, the purpose of the well, the date on which the work is to be commenced, the type of work to be done and the diameter of casing

to be installed. The notice must *be accompanied by the filing fee required by NRS 533.435 and must* include:

- (a) The signature of the ~~{contractor or the}~~ well driller responsible for the work;
- (b) The license number of the well driller responsible for the work; and
- (c) If applicable, the governmental agency identification number mandating the installation of the well, such as the number of a water right permit, waiver, case file or facility identification.

~~{3.}~~ **4.** The notice of intent to drill submitted pursuant to subsection 1 must be received by the Division at least 3 working days before the well rig is to be set up . ~~{and the drilling commenced.}~~ If a permit or waiver is required for the drilling operation, the number of the permit or waiver issued by the Division must be indicated on the notice of intent to drill in addition to the information required by subsection ~~{2.}~~

~~—4.}~~ **3.**

5. In addition to the requirements of subsections ~~{2 and 3,}~~ **3 and 4,** the notice of intent to drill must include global positioning system coordinates which:

- (a) Are either identified by latitude and longitude using decimal degrees or are identified using coordinates of the Universal Transverse Mercator system; and
- (b) Specify for each coordinate whether the North American Datum of 1927, North American Datum of 1983 or the World Geodetic System 1984 was used.

~~{5.}~~ **6.** If a well driller omits any of the information required by this section from the notice of intent to drill submitted to the Division pursuant to subsection 1, the Division may return the notice of intent to drill to the well driller for correction. ~~{Well drilling}~~ **A well driller** must not ~~{begin}~~ **set up the well rig or commence drilling or plugging the well** until ~~{after the Division approves}~~ **the well driller receives approval of** the corrected notice of intent to drill ~~{.~~

~~6.~~ *from the Division.*

7. A well driller may submit the notice of intent to drill required pursuant to subsection 1 to the Division in an electronic format if the Division approves this manner of submission for the well driller before the well driller submits the notice of intent to drill.

~~7.~~ 8. The forms evidencing notice of intent to drill will be furnished by the Division to the well driller on request and will be stamped and self-addressed.

~~8.~~ 9. If a well is to be drilled *or plugged* in a township that is located north of the Mount Diablo baseline, the notice of intent to drill must be submitted to the office of the Division located in Carson City. If a well is to be drilled *or plugged* in a township which is located south of the Mount Diablo baseline, the notice of intent to drill must be submitted to the office of the Division located in Las Vegas.

Sec. 22. NAC 534.325 is hereby amended to read as follows:

534.325 1. If the *drilling or plugging of a* well described on a notice of intent to drill is not ~~drilled~~ *commenced* within 60 days after the Division ~~receives and~~ approves the notice ~~of intent to drill~~, the notice *of intent to drill* lapses and a new notice *of intent to drill* must be submitted *and approved by the Division* before ~~the well is drilled.~~ *such activity may proceed.* The new notice *of intent to drill* must include the number of the lapsed notice ~~of intent to drill~~.

2. The well driller may set up the drill rig and commence drilling *or plugging a well* immediately after the Division receives and approves the new notice ~~of intent to drill~~.

3. The well driller shall indicate on the ~~record of work~~ *Well Driller's Report* for the well the number of the notice of intent to drill that the well driller last submitted for that well.

Sec. 23. NAC 534.330 is hereby amended to read as follows:

534.330 A well driller licensed by the State Engineer:

1. Must be present at the well-drilling site when the drill rig is in operation and when any activity involving the construction, *rehabilitation, reconditioning* or plugging of the well is conducted. If the licensed well driller leaves the drilling site, the drilling operation must be shut down until that licensed well driller or another well driller licensed pursuant to this chapter returns to the site. *If the Division determines that drilling operations occurred during any period in which a licensed well driller was not present at the well-drilling site, the Division may order the drilling operation to cease and conduct an investigation. The drilling operation may not recommence until the Division approves the drilling operation.*

2. Shall ensure that the drilling of the well complies with:

(a) The provisions of this chapter;

(b) The terms and conditions of any permit, waiver or order issued by the State Engineer; and

(c) The requirements of all other federal, state and local agencies which have jurisdiction over the land on which the well is to be drilled.

3. Shall carry the well driller's license card when he or she is present at the drilling site and produce the card when requested to do so by a representative of the Division.

4. Shall have in his or her possession at the well-drilling site the documentation of the approval by the Division of the notice of intent to drill submitted by the well driller for the well and shall produce that documentation upon request by a representative of the Division.

Sec. 24. NAC 534.340 is hereby amended to read as follows:

534.340 1. A ~~log and record of work~~ *Well Driller's Report* must be submitted *to the State Engineer* within 30 days after the completion of *the drilling or plugging of* a well by the well driller pursuant to NRS 534.170 and must be typewritten or legibly handwritten in black ink

~~It~~ *on a form provided by the Division. Submission of a Well Driller's Report is not required for the rehabilitation of an existing well.*

2. In addition to the information required pursuant to NRS 534.170, the following information must be contained in the ~~log and record of work:~~ *Well Driller's Report:*

- (a) The complete name and address of the person for whom the work is being performed.
- (b) The location of the well, including:

- (1) A description of its location by public land survey and county assessor's parcel number.

- (2) Global positioning system coordinates which:

- (I) Are either identified by latitude and longitude using decimal degrees or are identified using coordinates of the Universal Transverse Mercator system; and

- (II) Specify for each coordinate whether the North American Datum of 1927, North American Datum of 1983 or the World Geodetic System 1984 was used.

- (3) In a ~~log and record of work:~~ *Well Driller's Report* for a well drilled for domestic use, the address of the house to be served by the well, *the county assessor's parcel number and, if available*, the lot and block description and the name of the subdivision.

- ~~[(4) If applicable, the waiver number or permit number.]~~

- (c) Any pumping test or development data.

- (d) An accurate identification of the water-bearing formations.

- (e) ~~If the~~ *The* static water level, ~~is~~ measured from the ~~top of the casing, the elevation of the top of the casing above the~~ land surface.

- (f) Any applicable water rights permit or waiver number.

- (g) The temperature of the water in the well measured in degrees Fahrenheit.*

3. An accurate description of the perforations in the casing must be set forth in the section of the ~~{log and record of work}~~ *Well Driller's Report* that contains a record of the well casing.

4. If the well ~~{driller does not have a thermometer, the temperature of the water may be described in the log and record of work as cold, warm or hot.~~

~~—5.— The flow from a well which flows or is pumped may be determined for the purpose of the log and record of work by measuring} is tested by:~~

(a) Pumping pursuant to subsection 3 of NRS 534.170, the information must be reported on the Well Driller's Report in gallons per minute of flow.

(b) Flow, the length of time it takes to fill a container of known capacity , if the flow is not too large to be *accurately* measured in that manner ~~†~~

~~6.— As used in this section, “pumping test” means a test of a well conducted by pumping a specified amount or continuous flow of water from a well to determine the characteristics of the well or an aquifer.} , must be reported on the Well Driller's Report.~~

~~↪ The duration of such testing must not exceed 72 hours, unless otherwise approved by the Division.~~

Sec. 25. NAC 534.345 is hereby amended to read as follows:

534.345 1. All work performed by the well driller during the drilling operation must be accurately described in the ~~{log and record of work}~~ *Well Driller's Report* submitted by the well driller pursuant to NRS 534.170 and NAC 534.340.

2. The completed ~~{log and record of work}~~ *Well Driller's Report* must be signed by ~~†~~
~~—(a) The} the~~ licensed well driller who is present at the well-drilling site as required pursuant to NAC 534.330 . ~~†; or~~

~~—(b) The drilling contractor responsible for the work pursuant to NAC 534.296.}†~~

3. A well driller may submit the ~~log and record of work required to be submitted to the State Engineer pursuant to NRS 534.170 and NAC 534.340~~ *Well Driller's Report* in an electronic format if the Division approves this manner of submission for the well driller before the well driller submits the ~~log and record of work~~ *Well Driller's Report*.

4. If any of the information required to be included by ~~regulation or statute~~ *this chapter or chapter 534 of NRS* is omitted from ~~the log and record of work~~ *a Well Driller's Report*, the Division ~~will~~ *shall* return the ~~log and record of work~~ *Well Driller's Report* to the well driller for correction. Any corrections to the ~~log and record of work~~ *Well Driller's Report* must be made and submitted to the State Engineer within 30 days after the date on which the well driller receives the ~~log and record of work~~ *returned Well Driller's Report* from the Division. If corrections are made to the ~~log and record of work~~ *returned Well Driller's Report* and submitted to the State Engineer ~~:~~

~~—(a) Thirty-one days or more after the date on which the well driller receives the log and record of work but less than 90 days after that date, the log and record of work shall be deemed to be submitted late and the Division shall assess demerit points against the license of the well driller pursuant to NAC 534.500; or~~

~~—(b) Ninety~~ *31* days or more after the date on which the *Division returned the Well Driller's Report to the* well driller ~~receives the log and record of work, the log and record of work~~ *for correction, the Well Driller's Report* will be accepted by the State Engineer but the late submittal of the ~~log and record of work~~ *Well Driller's Report* shall be deemed to be a failure to file the ~~log and record of work~~ *Well Driller's Report* and the Division shall assess demerit points against the license of the well driller pursuant to NAC 534.500.

Sec. 26. NAC 534.350 is hereby amended to read as follows:

534.350 The name and address of the contractor drilling the well must be conspicuously displayed in legible letters at least 3 inches high on the drill rig operated or owned by that contractor. ~~{The identification must be displayed on the rig before the rig is positioned at the drill site.}~~

Sec. 27. NAC 534.360 is hereby amended to read as follows:

534.360 1. Except as otherwise provided in subsection 2, all wells must be cased to the bottom of the well bore and constructed to prevent contamination or waste of the groundwater.

2. If no additional water is developed in the bottom portion of a well ~~{}~~ *bore*, neat cement, cement grout or concrete grout must be placed by tremie pipe in an upward direction from the bottom of the well *bore* to the bottom of the casing. ~~{Unused pilot holes below the depth of the cased constructed well must have a minimum plug of 5 feet of neat cement or cement grout to isolate the pilot hole from the cased constructed well and may be plugged with bentonite chips below the cement plug.}~~

3. The casing must:

(a) Except as otherwise provided in this paragraph and NAC 534.362, be of new steel or clean and sanitary used steel. Materials other than steel may be used if the design of the well or the subsurface conditions prevent the use of steel casing and a professional engineer who holds a ~~{certificate of registration}~~ *license* issued pursuant to chapter 625 of NRS has approved the casing materials.

(b) Be free of pits and breaks.

4. The thickness of the wall of the casing must:

(a) For depths of 300 feet or less, conform to the following minimum specifications, allowing for mill tolerance:

(1) If the conductor casing is 50 feet or less in depth, the thickness of the wall must be:

(I) At least 0.141 or 9/64 of an inch if the wall is made of a material other than galvanized steel pipe that has been corrugated; or

(II) At least 0.109 or 7/64 of an inch if the wall is made of galvanized steel pipe that has been corrugated.

(2) If the depth of the conductor casing exceeds 50 feet, and for all production or intermediate casing, the wall must be sufficiently thick to conform to the casing sizes listed in sub-subparagraphs (I) to (IV), inclusive:

(I) If the casing is smaller than 10 inches nominal size, the wall must be at least 0.188 or 3/16 of an inch thick.

(II) For 10-, 12-, 14- and 16-inch nominal size casing, the wall must be at least 0.250 or 1/4 of an inch thick.

(III) For 18- and 20-inch nominal size casing, the wall must be at least 0.312 or 5/16 of an inch thick.

(IV) For casing larger than 20 inches nominal size, the wall must be at least 0.375 or 3/8 of an inch thick.

(b) For depths of more than 300 feet, be increased in accordance with the *American Water Works Association Standard ~~A100-~~ A100-06, which is hereby adopted by reference. A copy of the standard may be obtained by mail from the American Water Work Association, 6666 W. Quincy Ave., Denver, Colorado 80235-3098, by telephone at (800) 926-7337 or at the Internet address <http://www.awwa.org>, at a cost of \$88.*

5. The top of the casing on all wells must be at least 18 inches above the surface of the ground or the finished grade.

6. All production casing joints must be threaded and coupled or welded and be watertight. If the casing joints are welded, each joint must be welded completely. Spot welds of casing joints are prohibited.

7. The well driller shall ensure that the integrity of any casing to be used in the construction of the well has not been impaired by storage, shipping, handling, perforating or exposure to ultraviolet light.

Sec. 28. NAC 534.370 is hereby amended to read as follows:

534.370 1. The *well* driller shall take the precautions necessary to:

(a) Seal off any known zones of poor quality water which may affect the zones of good quality water in the well.

(b) Prevent contamination or waste of groundwater.

2. Any additive used in drilling a well , *including, without limitation, lost circulation materials*, must be ~~{safe}~~ *capable of being broken down safely* and must not *be an organic substance or* contaminate or induce contamination of the groundwater. *As used in this subsection:*

(a) “Lost circulation materials” means substances added to drilling fluids when drilling fluids are being lost to the formations downhole.

(b) “Organic substance” includes, without limitation, paper products, wood products, brans, hulls, grains, starches, hays, straws and proteins.

3. If it becomes necessary for the driller to discontinue the drilling operation before completion of the well, the well must be covered securely to prevent a contaminant from entering the casing or borehole and rendered secure against entry by children, domestic animals and wildlife.

4. After drilling is completed, all openings must be closed off to prevent contamination of the well. A sanitary well cap or welded plate must be welded to the well.

5. If drilling is suspended for any reason, the Division must be notified within 24 hours after drilling is suspended or before the drilling equipment is moved from the drilling site, whichever occurs first. The suspension of drilling without completing or plugging the well must be approved by the Division.

Sec. 29. NAC 534.375 is hereby amended to read as follows:

534.375 **1. *Before commencing construction of a new water well, a licensed well driller shall:***

(a) Investigate the drilling conditions, the geology of potential aquifers and overlying materials in the area in which the new water well is located by examining Well Driller's Reports in the database maintained on the Division's website for wells located in the area in which the new water well will be located;

(b) Identify possible problems with water quality; and

(c) Identify contaminated water-bearing zones that may be encountered during the construction of the water well.

2. If a contaminant or contaminated water is encountered during the construction of a **water** well, the strata which contain the contaminant or contaminated water must be cased or sealed in such a manner that the contaminant or contaminated water does not commingle with or impair other strata or the water contained in other strata. The well driller shall, by grouting or by using special seals or packers, prevent the movement of the contaminant or contaminated water in the well bore.

Sec. 30. NAC 534.380 is hereby amended to read as follows:

534.380 1. Except as otherwise provided in subsection 2, before the drill rig is removed from the drill site of a well, the annular space between the well bore and the casing must be sealed to a minimum depth of 50 feet below ground level by:

(a) Placing neat cement, cement grout, concrete grout or bentonite chips from the sealing depth to 20 feet from the surface; and

(b) Placing neat cement, cement grout or concrete grout from 20 feet below the surface to the surface.

↪ If sodium bentonite chips are placed in the annular space, the chips must be placed in such a manner that a bridge does not occur. If bentonite chips are poured in standing water, the bentonite chips must be screened to eliminate the fines.

2. Before the drill rig is removed from the drill site of a well, the annular space between the well bore and the casing must be sealed to a depth of greater than 50 feet below ground level if sealing to such a depth is required by subsection 1 of NAC 534.370, NAC 534.375, subsection 1 of NAC 534.378 or paragraph (b) of subsection 1 of NAC 534.390. If the well is regulated by the Bureau of Safe Drinking Water of the Division of Environmental Protection of the State Department of Conservation and Natural Resources, the annular space must be sealed in accordance with NAC 445A.66905.

3. The casing must be centered as nearly as practicable in the well bore to allow the sanitary seal to surround the casing.

4. If a temporary conductor casing is used, it must be withdrawn during the placement of the grout.

5. If a pitless adapter is used : ~~in domestic or small commercial wells;~~

(a) The sanitary seal must begin not more than 5 feet below ground level;

(b) The sanitary seal must extend at least 50 feet below the bottom elevation of the pitless adapter; and

(c) The portion of the casing above the sanitary seal must be backfilled to ground level with uncontaminated soil which is compacted.

6. A pipe used to feed gravel through the cement seal or to provide access to the interior of the well must be fitted with a watertight cap.

7. A licensed well driller must place the seal or directly supervise the placement of the seal.

8. The seal must be placed:

(a) In the annular space within 3 days after the casing is set and before the drill rig is removed from the drill site.

(b) In one continuous mass from the minimum depth of 50 feet below ground level to the surface.

(c) By tremie pipe in an upward direction to displace the fluid to the surface of the ground, if any fluid is standing in the well bore above the sealing depth.

9. The diameter of the well bore must be at least 4 inches larger than the largest diameter of the outside of the outermost casing to be used, including any joints or collars. If a fill pipe for gravel is installed, the diameter of the well bore must be 4 inches larger than the largest diameter of the casing plus the largest diameter of the fill pipe for gravel. A fill pipe for gravel or any other pipe to provide access to the interior of the well must be completely surrounded by the seal.

A conductor casing may be used to convey the gravel pack. If a conductor casing is used:

(a) The diameter of the well bore must be at least 4 inches larger than the largest diameter of the conductor casing; and

(b) The annular space between the conductor casing and the well bore must be sealed.

10. A watertight seal must be installed at the surface level between the conductor casing and the production casing to prevent any contaminants from entering the gravel pack conductor area. A welded plate or a seal consisting of neat cement, cement grout or concrete grout from a minimum depth of 10 feet below ground level to the surface must be used. If a welded plate is used, the entire length of the plate must be welded to the conductor casing and production casing.

Sec. 31. NAC 534.420 is hereby amended to read as follows:

534.420 1. Except as otherwise provided in NAC 534.422, wells *other than monitoring wells* must be plugged in the manner prescribed in this section by a well driller licensed by the State Engineer.

2. A well driller shall:

(a) Ensure that *in accordance with NAC 534.320* a notice of ~~his or her~~ intent to ~~plug a water well~~ *drill* is received by the Division not less than 3 working days before the drill rig is moved to the location where the well will be plugged; and

(b) Notify the Division not less than 24 hours before beginning to plug the well.

3. Before the well driller begins to plug the well, he or she shall, if possible, obtain the ~~log and record of work~~ *Well Driller's Report* for that well from the Division or the owner of the well.

4. ~~On abandonment or order of the State Engineer, a water~~ *A* well must be plugged *pursuant to this section* by:

(a) Removing the pump or debris from the well bore with appropriate equipment; and

(b) If an annular cement seal was not installed, ~~breaking~~ *attempting to break* the casing free with appropriate equipment so that the casing may be pulled from the well.

5. If the casing in the well:

(a) Breaks free, the well driller shall plug the borehole in the manner prescribed in NAC 534.4371 as the casing is pulled from the well. The well must be plugged from the total depth of the well to the surface of the well, in stages if necessary, to displace in an upward direction any fluid or debris in the well.

(b) ~~Does~~ *Except as otherwise provided in paragraph (c), does* not break free, the well driller shall perforate that portion of the casing which extends from the bottom of the well ~~to not less than 50 feet above the top of the uppermost saturated groundwater stratum or~~ to the surface of the well ~~to~~ *or to the level of the annular seal if the annular seal remains intact*. That portion of the casing must be perforated not less than four times per each 2 linear feet to allow the plugging fluid to penetrate the annular space and the geologic formation. The perforations made in each 2 linear feet of the casing must be made along a horizontal plane of the well bore. A well with a diameter of more than 8 inches in nominal size must be perforated a sufficient number of additional times per linear foot to ensure that the plugging fluid penetrates into the annular space and formation. ~~Except as otherwise provided in subsections 8 and 9, the~~ *The* well driller shall then plug the well from the total depth of the well ~~to 50 feet above the uppermost saturated groundwater stratum or~~ to within 20 feet of the surface of the well with neat cement, cement grout ~~, bentonite chips~~ or bentonite grout . ~~containing not less than 20 percent sodium bentonite by weight of water. If the neat cement, cement grout, bentonite chips or bentonite grout containing not less than 20 percent sodium bentonite by weight of water is not brought to within 50 feet above the uppermost saturated groundwater stratum or to within 20 feet of the surface of the well, the well driller shall:~~

~~——(1) Measure the depth of the top of the lower plug with the appropriate equipment after he or she has allowed sufficient time for the lower plug to set up;~~

~~— (2) Continue to install neat cement, cement grout, bentonite chips or bentonite grout containing not less than 20 percent sodium bentonite by weight of water until the top of the lower plug remains at least 50 feet above the top of the uppermost saturated groundwater stratum; and~~

~~— (3) Install uncontaminated fill material or one of the plugging materials described in subsection 3 of NAC 534.4371 from the top of the lower plug to within 20 feet of the surface of the well.~~

~~— 6. The well driller shall place a surface plug in the well consisting of neat cement, cement grout or concrete grout from a depth of at least 20 feet to the surface of the well.~~

~~— 7. If the well casing does not break free and there is no evidence of a sanitary seal around the well casing, the well driller shall, in addition to the requirements of subsection 5, perforate the upper 50 feet of casing before setting the surface plug. The casing must have at least four perforations per each 2 linear feet of casing, and the surface plug must consist of neat cement and must extend from 50 feet below ground level to the surface of the well.~~

~~— 8. If there is evidence that water-bearing formations of different water quality or hydraulic head were encountered during the original well construction and the well casing does not break free, and if bentonite chips are used as the plugging material, the well driller must, in addition to the requirements of this section, perforate the casing, as needed, and place neat cement across each confining formation so that the plugging fluid penetrates the annular space and the geologic formation in that interval.~~

~~— 9. If the well casing does not break free and there is no well log available, the well driller must plug the well in accordance with paragraph (b) of subsection 5, except that bentonite chips~~

~~must not be used as the plugging material, so that the plugging fluid penetrates the annular space and the geologic formation in the perforated intervals.~~

~~—10.]~~ *The well driller shall place a surface plug in the well consisting of neat cement, cement grout or concrete grout from a depth of at least 20 feet to the surface of the well.*

(c) Does not break free and there is no evidence of a sanitary seal around the well casing, the well driller shall perforate the casing from the bottom of the well to the surface of the well. The casing must be perforated not less than four times per each 2 linear feet to allow the plugging fluid to penetrate the annular space and the geologic formation. The perforations made in each 2 linear feet of the casing must be made along a horizontal plane of the well bore. A well with a diameter of more than 8 inches in nominal size must be perforated a sufficient number of additional times per linear foot to ensure that the plugging fluid penetrates into the annular space and the geologic formation. The well driller shall then plug the well from the total depth of the well to within 20 feet of the surface of the well with neat cement, cement grout or bentonite grout. The well driller shall place a surface plug in the well consisting of neat cement, cement grout or concrete grout from a depth of at least 20 feet to the surface of the well.

6. A well driller shall submit a ~~log and record of work]~~ *Well Driller's Report* to the ~~[Division]~~ *State Engineer* within 30 days after a water well has been plugged. The ~~log and record of work]~~ *Well Driller's Report* must contain the location of the well by public land survey and county assessor's parcel number, the name of the owner of the well, the condition of the well, the static water level before plugging and a detailed description of the method of plugging, including, but not limited to:

- (a) The depth of the well;

- (b) The depth to which the materials used to plug the well were placed;
- (c) The type, size and location of the perforations which were made in the casing;
- (d) The debris encountered in, milled out of or retrieved from the well; and
- (e) The materials used to plug the well.

~~{H1}~~ 7. If there is any standing liquid in the interval of the well bore that is being plugged, all grout materials used pursuant to this section must be placed by tremie pipe in an upward direction.

~~{H2. — If sodium bentonite chips or pellets are placed in the well, the chips or pellets must be placed in such a manner that a bridge does not occur. If bentonite chips are poured in standing water, the bentonite chips must be screened to eliminate the fines.}~~

Sec. 32. NAC 534.422 is hereby amended to read as follows:

534.422 1. A well driller who wishes to plug a well in a manner that does not comply with the provisions set forth in NAC 534.420 must request ~~{approval from the Division.}~~ *a waiver pursuant to NAC 534.450.*

2. If the Division authorizes the well driller to plug the well in a manner other than the manner set forth in NAC 534.420, the well driller shall comply with the instructions he or she receives from the Division, if any, relating to the manner in which the well must be plugged.

Sec. 33. NAC 534.427 is hereby amended to read as follows:

534.427 1. If any type of permit, *certificate*, waiver or application to appropriate water from a water well is cancelled, abrogated, forfeited, withdrawn, *expired* or denied, the well must be plugged in the manner prescribed in NAC 534.420 ~~{H}~~ *or authorized pursuant to NAC 534.422.*

2. ~~Except as otherwise provided in subsection 9 of NAC 534.315, a~~ A well, other than a water well drilled for a domestic purpose, must be plugged in the manner prescribed in NAC 534.420 *or authorized pursuant to NAC 534.422* if:

(a) The Division has not issued a permit or waiver for the well; or

(b) The well is not located in a designated basin and there is no reasonable expectation of obtaining a valid permit, waiver or certificate of water right from the Division.

3. A well, including a water well drilled for a domestic purpose, must also be plugged in the manner prescribed in NAC 534.420 *or authorized pursuant to NAC 534.422* if the State Engineer sends a notice to the owner of the well ~~pursuant to subsection 9 of NAC 534.315~~ *by certified mail, return receipt requested, indicating that the well must be plugged* and either:

(a) The State Engineer has determined that the well is in any manner defective; or

(b) The Division makes a finding that:

(1) The well tends to impair existing rights or the safety and welfare of the residents of this State;

(2) The mechanical integrity of the construction of the well has failed or is unknown;

(3) The well was not drilled in compliance with the provisions of this chapter;

(4) The well was not drilled in compliance with the provisions of chapter 534 of NRS;

(5) The well tends to cause contamination of the groundwater aquifer;

(6) There is no evidence of impending use of the well for any legal purpose or that no legal use of the well is allowed; or

(7) The well tends to cause water to be wasted above or below the surface of the well.

Sec. 34. NAC 534.430 is hereby amended to read as follows:

534.430 1. Except as otherwise provided in subsection 3, each well that is drilled ~~†~~
~~deepened or reconditioned~~ must have:

- (a) An access port near the top of the casing that is not less than 1 inch in diameter;
- (b) A commercially manufactured sanitary well cap that may be easily removed to determine the level of water in the well; or
- (c) A reliable electronic means to measure the level of water in the well.

2. An access port must have a watertight, screw-type cap seal to prevent contamination and must be kept closed.

3. On wells that are 8 inches in diameter or smaller, the access may be a 1/2-inch hole at the top of the casing or in the casing cover with a removable plug or bolt.

4. As used in this section, “access port” means an opening in the top of a well casing in the form of a tapped hole and plug or a capped pipe welded on the casing to permit entry of a device to measure the water level of the well.

Sec. 35. NAC 534.4351 is hereby amended to read as follows:

534.4351 ~~††~~ A monitoring well must be:

~~†(a)~~ 1. Drilled only by a well driller who is licensed by the State Engineer;

~~†(b)~~ and

2. Constructed in accordance with the provisions of this chapter, except for any provision that is waived by the State Engineer. ~~†; and~~

~~—(c) Drilled only for the purpose of complying with federal, state or local environmental requirements or any other federal, state or local requirements.~~

~~—2.— A plat map showing the actual location of the monitoring well, a map of the vicinity and a log and record of work which contains the information described in NRS 534.170 and NAC~~

~~534.340 must be submitted within 30 days after completion of the well by the person who is responsible for the well. The plat map must indicate the distance of the well from permanent reference points, including streets, roads or section lines. The map must be drawn on paper measuring 8 1/2 inches by 11 inches or 11 inches by 17 inches.~~

Sec. 36. NAC 534.4353 is hereby amended to read as follows:

534.4353 1. The owner of a monitoring well shall ensure that the well:

(a) Is constructed in accordance with the provisions of this chapter or a waiver and does not allow contamination of groundwater during its use; and

(b) Is plugged upon abandonment in accordance with NAC 534.4365 when the well is no longer monitored or when otherwise required.

2. A permit to appropriate water or a waiver from the State Engineer is ~~not~~ required to drill and collect data from a monitoring well . ~~unless the well is not constructed in the manner prescribed in this chapter or the well is not required by a governmental agency.~~

3. The well driller shall, when submitting the notice of intent to drill pursuant to NAC 534.320, submit to the Division a notarized affidavit, on a form prescribed by the Division, ~~which indicates~~ *from* the person who will be responsible for plugging the well upon abandonment ~~and which is signed by:~~

~~—(a) For private lands, the person or authorized representative of the company that is the owner of record of the property; or~~

~~—(b) For public lands, the person or authorized representative of the company that has the appropriate authorization to use the public lands. A copy of the authorization must be included with the affidavit.~~ *acknowledging that responsibility.*

4. The owner of a monitoring well shall maintain a record of the current status of the monitoring well and shall notify the Division in writing as soon as practicable after determining that the well will no longer be used.

5. If a monitoring well or any other well is to be used to remove a contaminant from groundwater, ~~an~~ *an environmental* permit ~~to appropriate water for environmental purposes~~ must be obtained from the State Engineer pursuant to the provisions of NRS 533.437 to 533.4377, inclusive.

Sec. 37. NAC 534.4355 is hereby amended to read as follows:

534.4355 1. A well driller shall install casing in a monitoring well. If polyvinyl chloride casing is used, it must comply with the standards adopted by reference pursuant to subsection 1 of NAC 534.362.

2. The well driller shall take the precautions necessary to prevent contamination of groundwater. The equipment used to construct a monitoring well must ~~be decontaminated~~ *be disinfected* before the construction of the well is commenced.

3. The diameter of the casing must not exceed 4 inches in nominal size.

4. The connections of the casing must comply with the provisions of NAC 534.360 or 534.362. The connections must be made watertight by ~~wrapping~~ :

(a) Wrapping them with teflon tape ~~placing~~ ;

(b) Placing a ring or gasket between them ; or ~~by~~

(c) By any other method which will not introduce contaminants into the well ~~it~~ *except gluing*.

5. Both ends of the casing must be capped.

6. The perforations must be of a width and length which will allow the strata to be observed while not permitting the infiltration of the gravel pack through the casing or allowing the contaminants or water from separate strata to commingle.

7. To ensure adequate space for the gravel pack and seals, the well bore of a monitoring well must, for the entire length of the casing placed in the well, be not less than 4 inches larger than the diameter of the casing.

8. Not more than one perforated or screened section of casing may be placed in the well bore of a monitoring well unless the vertical intervals of the well bore in between the screened sections are sealed with neat cement, cement grout ~~{}~~ or cement-bentonite grout . ~~{or bentonite chips.}~~

9. Not more than one casing may be placed in the well bore of a monitoring well unless the vertical intervals of the well bore in between the screened sections of the casings are sealed with neat cement, cement grout ~~{}~~ or cement-bentonite grout . ~~{or bentonite chips.}~~

10. Monitoring wells must be drilled an adequate distance from each other to ensure that there is no commingling of the contaminants or groundwater encountered in the wells.

11. For the purposes of this section, “disinfected” means the process of inactivating harmful and objectionable bacteria, including, without limitation, coliform, by various agents or processes approved by the Board.

Sec. 38. NAC 534.4357 is hereby amended to read as follows:

534.4357 1. If the water or vapors which are being monitored in a monitoring well are not encountered within 5 feet below the surface of the ground, the well driller shall place in the annular space of the well:

(a) From the bottom of the well to a maximum of 2 feet above the uppermost perforation in the casing, a gravel pack which consists of quartz sand, silica or other materials which will not contaminate the groundwater or the geologic formation;

(b) From the gravel pack placed pursuant to paragraph (a) to a minimum of 2 feet above that gravel pack or to within 20 feet below the surface of the ground, a seal consisting of bentonite chips; and

(c) From the seal placed pursuant to paragraph (b) to the surface, a seal, with a minimum thickness of 20 feet below the surface, consisting of cement grout, neat cement or concrete ~~+~~ *grout*.

2. If the water or vapors which are being monitored in a monitoring well are encountered within 5 feet below the surface of the ground, the well driller shall comply with the requirements of subsection 1, except that:

(a) The gravel pack required pursuant to paragraph (a) of subsection 1 must extend only 6 inches above the uppermost perforation in the casing; and

(b) The surface seal required pursuant to paragraph (c) of subsection 1 must be placed from 1 foot below the surface to the surface.

3. The well driller shall ensure that a bridge does not occur in the annular space during the placement of the gravel pack and seals required pursuant to this section.

4. If more than 20 continuous feet of grout are placed in the annular space of the well or if there is standing liquid in the well bore above the sealing depth, the grout must be placed by tremie pipe in an upward direction.

Sec. 39. NAC 534.4365 is hereby amended to read as follows:

534.4365 1. Except as otherwise provided in this section, a monitoring well must be plugged *by a licensed well driller* within 30 days after monitoring is no longer required.

2. ~~[[H]]~~ *Except as otherwise provided in subsection 4, if* the casing *in the monitoring well* cannot be removed ~~[-a] from the well bore, the~~ monitoring well must be plugged by placing neat cement by tremie pipe in an upward direction from the bottom of the well to the surface of the well. ~~[Alternatively, the appropriate volume of bentonite chips may be used from the bottom of the monitoring well to within 20 feet below the surface of the well. The well driller shall place a surface plug consisting of neat cement, cement grout or concrete grout in the well from a depth of at least 20 feet to the surface of the well.]~~

3. ~~[[H]]~~ *Except as otherwise provided in subsection 4, if* the casing in the monitoring well can be removed from the well bore, the bottom end of the casing in the monitoring well must be removed or perforated and neat cement ~~[or bentonite chips]~~ must be placed by tremie pipe in an upward direction from the bottom of the well to ~~[within 20 feet of]~~ the surface of the well as the casing is removed from the well bore. The well driller shall place a surface plug consisting of neat cement, cement grout or concrete grout in the well from a depth of at least 20 feet to the surface of the well. *If the casing in the monitoring well does not exceed 4 inches in diameter, the casing may be used as the tremie pipe.*

4. If ~~[the integrity of the borehole remains intact as the casing is removed from the well bore, the well may be plugged as a borehole as provided in NAC 534.4371.~~

~~—5.— If there is evidence that water draining formations, or water bearing formations of different water quality or hydraulic head were encountered during the original monitoring well construction and the casing does not break free, and if bentonite chips are used as the plugging material, the driller must, in addition to the requirements of this section, perforate the casing as~~

~~needed and place neat cement across each confining formation so that the plugging fluid penetrates the annular space and the geologic formation in that interval.~~

~~—6. If the water-bearing formations are unknown and any casing does not break free, bentonite chips must not be used as the plugging material. The driller must perforate the casing as needed and plug the monitor well with neat cement so that the plugging fluid penetrates the annular space and the geologic formation.]~~ *a request for a waiver of the requirements in NAC 534.4355 and 534.4357 has been granted by the State Engineer pursuant to NAC 534.441, the well must be plugged in the manner prescribed in NAC 534.420 or authorized pursuant to NAC 534.422.*

Sec. 40. NAC 534.4371 is hereby amended to read as follows:

534.4371 1. A borehole must be plugged within 60 days after it is drilled.

2. Except as otherwise provided in subsections 4, 7 and 8 and NAC 534.438, a borehole must be plugged:

(a) In the manner prescribed for plugging a well in NAC 534.420 ~~§~~ *or authorized pursuant to NAC 534.422;* or

(b) If the uppermost saturated groundwater stratum is above the bottom of the borehole:

(1) By placing concrete grout, cement grout, neat cement or bentonite grout by tremie pipe in an upward direction from the bottom of the borehole to within 20 feet of the surface and by placing concrete grout, cement grout or neat cement from 20 feet below the surface to the surface;

(2) By placing bentonite chips specifically designed to be used to plug boreholes from the bottom of the borehole to within 20 feet of the surface and by placing concrete grout, cement grout or neat cement from 20 feet below the surface to the surface; or

(3) By placing any of the plugging materials described in this subsection from the total depth of the borehole to 50 feet above the uppermost saturated groundwater stratum and by placing concrete grout, cement grout, or neat cement from 20 feet below the surface to the surface.

3. If the concrete grout, cement grout, neat cement, bentonite grout or bentonite chips are not brought to within 20 feet of the surface pursuant to paragraph (b) of subsection 2, the person responsible for plugging the borehole shall:

(a) Measure the depth of the top of the lower plug with the appropriate equipment after he or she has allowed sufficient time for the lower plug to set up;

(b) Continue to install concrete grout, cement grout, neat cement, bentonite grout or bentonite chips until the top of the lower plug remains at least 50 feet above the top of the uppermost saturated groundwater stratum;

(c) Install uncontaminated fill material or one of the plugging materials described in this subsection from the top of the lower plug to within 20 feet of the surface; and

(d) Place concrete grout, cement grout or neat cement from 20 feet below the surface to the surface.

4. If the elevation of the bottom of the borehole is higher than the preexisting natural elevation of the uppermost saturated groundwater stratum, the borehole must be plugged by:

(a) Backfilling the borehole from the bottom of the borehole to within 20 feet of the surface with uncontaminated soil; and

(b) Placing concrete grout, cement grout or neat cement from 20 feet below the surface to the surface.

5. If bentonite chips or uncontaminated soil is placed in the borehole, they must be placed in such a manner that a bridge does not occur. If poured in standing water, bentonite chips must be screened to eliminate the fines. Bentonite chips may be placed by tremie pipe.

6. If casing is set in a borehole, the borehole must be completed as a well pursuant to the provisions of this chapter. The borehole must be plugged pursuant to NAC 534.420 ~~or as~~ *authorized pursuant to NAC 534.422* or the casing must be removed from the borehole when it is plugged. The upper portion of the borehole may be permanently cased if the annular space between the casing and the walls of the borehole is completely sealed from the bottom of the casing to the surface pursuant to NAC 534.380.

7. If there is evidence that water-draining formations (lost circulation), or water-bearing formations of different water quality or hydraulic head were encountered during the original borehole construction and if bentonite chips or bentonite grout is used as the plugging material, the *well* driller must, in addition to the requirements of this section, place neat cement across the water-confining formations so that the plugging fluid penetrates the geologic formation to prevent the vertical movement of water. Any drilling casing or pipe that does not break free, and occludes the placement of neat cement across a confining formation, must be perforated so that the plugging fluid penetrates the annular space and the geologic formation in that interval.

8. If the water-bearing formations are unknown and any drilling casing or pipe does not break free, the *well* driller must plug the borehole in accordance with paragraph (b) of subsection 5 of NAC 534.420 ~~or as~~ *authorized pursuant to NAC 534.422* so that the plugging fluid penetrates the annular space and the geologic formation in the perforated intervals.

Sec. 41. NAC 534.440 is hereby amended to read as follows:

534.440 1. ~~{The}~~ A request for a waiver to drill an exploratory well to determine the quality or quantity of water pursuant to NRS 534.050 in a designated basin must be submitted *to the State Engineer* in writing and contain the following information:

(a) The location by public land survey, county assessor's parcel number, map of the vicinity and plat map of the exploratory well anticipated to be drilled;

(b) The name, address and telephone number of the person who:

(1) Is collecting data from the exploratory well; and

(2) Will be available to answer questions concerning the well;

(c) The reason for requesting a waiver;

(d) The proposed diameter and depth of the exploratory well;

(e) The estimated starting and completion dates of the exploratory well, not to exceed 90 days after authority is given to drill;

(f) The name, address and telephone number of the person who will be responsible for plugging the well, and the name, address and telephone number of the owner of the land where the well will be located if the owner is not the person responsible for plugging the well; *and*

(g) A notarized affidavit, on a form prescribed by the Division, ~~{which indicates}~~ *from* the person who will be responsible for plugging the well upon abandonment ~~{and which is signed by}~~

~~—— (1) For private lands, the person or an authorized employee of the company that is the owner of record of the property; or~~

~~—— (2) For public lands, the person or an authorized employee of the company that has the appropriate authorization to use the public lands; and~~

~~—(h) For private lands, written authorization to access the project area from the person or an authorized employee of the company that is the owner of record of the property and for public lands, a copy of the written authorization from the appropriate agency that has granted the right to use the public lands.~~ *acknowledging that responsibility.*

2. Each waiver for an exploratory well will bear a unique number preceded by the letter “W.” The notice of intent to drill submitted to the Division pursuant to NAC 534.320 and the ~~record of work~~ *Well Driller’s Report* submitted to the Division pursuant to NRS 534.170 must bear this number.

3. ~~An application to appropriate underground water or an application to change an existing underground water right must be on file with the Division or accompany each request for a~~ *The duration of the development and testing of the flow of the exploratory well must not exceed 72 hours, unless otherwise approved in the* waiver.

4. A copy of the waiver must be in the possession of the well driller at the drill site.

5. The exploratory well must be:

(a) Plugged by the well driller in the manner prescribed in NAC 534.420 *or authorized pursuant to NAC 534.422* within 3 days after the completion of the aquifer tests for which the well was drilled; or

(b) ~~Completed~~ *Except as otherwise provided in this paragraph, completed* as a well pursuant to the provisions of this chapter before the drill rig is removed from the drill site. *The wellhead must be secured at the surface and water may not be pumped from the well until a permit to appropriate underground water is approved. If a permit to appropriate underground water is not approved at the location of the well within 1 year after the date of completion of*

the well, the well must be plugged in the manner prescribed in NAC 534.420 or authorized pursuant to NAC 534.422.

6. The water from the *exploratory* well may not be used for any purpose other than the purposes set forth in the waiver without the written approval of the State Engineer.

7. A waiver to drill an exploratory well will not be granted pursuant to this section for a well in an area in which the Division determines there is sufficient information existing concerning the aquifer for the area.

Sec. 42. NAC 534.441 is hereby amended to read as follows:

534.441 1. A request for a waiver to drill a monitoring well ~~{which is not required for the purpose of complying with a federal, state or local law}~~ must be submitted to the State Engineer in writing and contain:

(a) The location of the proposed monitoring well by public land survey, county assessor's parcel number, map of the vicinity and plat map;

(b) The name, address and telephone number of the owner of the land on which the monitoring well will be located;

(c) A statement of the reason for requesting the waiver;

(d) A proposed construction sketch of the monitoring well;

(e) The name of the monitoring well or, if a waiver is requested for multiple monitoring wells, a list of all monitoring wells for which a waiver is requested on the "Additional Well Locations" form;

(f) If requested or previously required, a current, updated copy of the ~~{MO Summary Sheet;}~~ *list setting forth the numbers of the monitoring wells for which waivers have been issued previously and the disposition of those wells;*

(g) The name, address and telephone number of the person who:

(1) Will collect data from the monitoring well; and

(2) Will be available to answer questions concerning the monitoring well; *and*

(h) A notarized affidavit, on a form prescribed by the Division, ~~which indicates~~ *from* the person who will be responsible for plugging the well upon abandonment ~~and which is signed by:~~

~~—(1) For private lands, the person or an authorized employee of the company that is the owner of record of the property; or~~

~~—(2) For public lands, the person or an authorized employee of the company that has the appropriate authorization to use the public lands; and~~

~~—(i) For private lands, written authorization to access the project area from the person or an authorized employee of the company that is the owner of record of the property or for public lands, a copy of the written authorization from the appropriate agency that has granted the right to use the public lands.~~ *acknowledging that responsibility.*

2. A waiver to drill a monitoring well will bear a unique number preceded by the letters “MO.” The notice of intent to drill submitted to the Division pursuant to NAC 534.320 and the ~~record of work~~ *Well Driller’s Report* submitted to the Division pursuant to NRS 534.170 must bear this number.

3. A copy of the waiver must be in the possession of the well driller at the drill site.

4. The monitoring well must be completed as a well pursuant to the provisions of this chapter or the waiver before the drill rig is removed from the drill site.

5. Water from the monitoring well may not be used for any purpose other than the purpose set forth in the waiver without the written approval of the State Engineer.

Sec. 43. NAC 534.442 is hereby amended to read as follows:

534.442 1. A request for a waiver to allow a temporary use of water from an existing well to explore for minerals or to drill a well and to use the water from the well to explore for minerals must be submitted to the State Engineer in writing and contain:

(a) The amount of water that will be ~~used~~ *pumped from the well* each day ~~is~~, *which must not exceed 5 acre-feet per project;*

(b) A brief description of the manner in which the water will be put to a beneficial use;

(c) The location of the water well by public land survey, county assessor's parcel number, map of the vicinity and plat map;

(d) The name, address and telephone number of the person who will be responsible for plugging the well, and the name, address and telephone number of the owner of the land where the well will be located if the owner is not the person responsible for plugging the well;

(e) A notarized affidavit, on a form prescribed by the Division, ~~which indicates~~ *from* the person who will be responsible for plugging the well upon abandonment ~~and which is signed by:~~

~~— (1) For private lands, the person or an authorized employee of the company that is the owner of record of the property; or~~

~~— (2) For public lands, the person or an authorized employee of the company that has the appropriate authorization to use the public lands;~~

~~— (f) For private lands, written authorization to access the project area from the person or an authorized employee of the company that is the owner of record of the property or for public lands, a copy of the written authorization from the appropriate agency that has granted the right to use the public lands;~~

~~(g)~~ *acknowledging that responsibility;*

(f) The name, address and telephone number of a person who will be available to answer questions concerning the well; and

~~(h)~~ (g) The date the project is scheduled to be completed.

2. A waiver granted for the temporary use of water from a well for the exploration of minerals will bear a unique number preceded by the letters “MM.” The notice of intent to drill submitted to the Division pursuant to NAC 534.320 and the ~~record of work~~ *Well Driller’s Report* submitted to the Division pursuant to NRS 534.170 must bear this number.

3. A copy of the waiver must be in the possession of the well driller at the drill site.

4. The well must be plugged in the manner prescribed in NAC 534.420 *or authorized pursuant to NAC 534.422* within 3 days after the completion of the project.

5. The water from the well may not be used for any purpose other than the purpose set forth in the waiver without the written approval of the State Engineer.

Sec. 44. NAC 534.444 is hereby amended to read as follows:

534.444 1. A request for a waiver to allow the temporary use of water from an existing well to explore for oil, gas or geothermal resources, or to drill a well and use the water from the well to explore for oil, gas or geothermal resources, must be submitted to the State Engineer in writing and contain:

(a) The location of the proposed water well and the oil, gas or geothermal well by public land survey, county assessor’s parcel number, map of the vicinity and plat map;

(b) The oil, gas or geothermal state or federal permit and lease number, name of the well and American Petroleum Institute number, if assigned;

(c) The amount of water that will be ~~consumed~~ *pumped* from the well each day ~~{}~~, *which must not exceed 5 acre-feet per each well;*

(d) The date the project is scheduled to be completed;

(e) The name, address and telephone number of the person responsible for plugging the well, and the name, address and telephone number of the owner of the land if the owner is not the person who is responsible for plugging the well;

(f) A notarized affidavit, on a form prescribed by the Division, ~~which indicates~~ *from* the person who will be responsible for plugging the well upon abandonment ~~and which is signed by:~~

~~—(1) For the private lands, the person or an authorized employee of the company that is the owner of record of the property; or~~

~~—(2) For public lands, the person or authorized employee of the company that has the appropriate authorization to use the public lands;~~

~~—(g) For private lands, written authorization to access the project area from the person or an authorized employee of the company that is the owner of record of the property and for public lands, a copy of the written authorization from the appropriate agency that has granted the right to use the public lands;}~~ *acknowledging that responsibility;* and

~~{h}~~ (g) The name, address and telephone number of a person who will be available to answer questions concerning the well.

2. A waiver that allows the temporary use of water from a water well to explore for oil, gas or geothermal resources will bear a unique number preceded by the letters “OG.” The notice of intent to drill submitted to the Division pursuant to NAC 534.320 and the ~~record of work~~ *Well Driller’s Report* submitted to the Division pursuant to NRS 534.170 must bear this number.

3. A copy of the waiver must be in the possession of the well driller at the drill site.
4. The well must be plugged in the manner prescribed in NAC 534.420 *or authorized pursuant to NAC 534.422* within 3 days after the completion of the project.
5. The water from the well may not be used for any purpose other than the purpose set forth in the waiver without the written approval of the State Engineer.
6. *A waiver will not be granted pursuant to this section if the State Engineer determines that the quantity of water requested will adversely affect or impair existing water rights or domestic wells.*

Sec. 45. NAC 534.446 is hereby amended to read as follows:

534.446 1. A request for a waiver to allow the temporary use of water from an existing well for the construction of a highway, or to drill a well and use the water from the well for the construction of a highway, must be submitted to the State Engineer in writing and contain:

(a) The location of the proposed water well by public land survey, county assessor's parcel number, map of the vicinity and plat map;

(b) The project and contract number, if applicable;

(c) The total amount of water that will be ~~consumed~~ *pumped from the well* each day;

(d) The name, address and telephone number of the contractor responsible for plugging the well, and the name, address and telephone number of the owner of the land where the well will be located if the owner is not the person responsible for plugging the well in accordance with NAC 534.420;

(e) A notarized affidavit ~~signed by the contractor~~, *on a form prescribed by the Division, from the person who will be* responsible for plugging the well ~~which states that he or she will be responsible for plugging the well;~~ *upon abandonment acknowledging that responsibility;*

(f) The name, address and telephone number of a person who will be available to answer questions concerning the project; and

(g) The date the project is scheduled to be completed.

2. A waiver that allows the temporary use of water from a well for the construction of a highway will bear a unique number preceded by the letter “C.” The notice of intent to drill submitted to the Division pursuant to NAC 534.320 and the ~~record of work~~ *Well Driller’s Report* submitted to the Division pursuant to NRS 534.170 must bear this number.

3. A copy of the waiver must be in the possession of the well driller at the drill site.

4. The well must be plugged in the manner prescribed in NAC 534.420 *or authorized pursuant to NAC 534.422* within 3 days after the completion of the project.

5. The water from the well may not be used for any purpose other than the purpose set forth in the waiver without the written approval of the State Engineer.

Sec. 46. NAC 534.448 is hereby amended to read as follows:

534.448 1. A request for a waiver to drill a well in a shallow groundwater system for removing water for the purpose of alleviating potential hazards to persons and property resulting from the rise of groundwater caused by secondary recharge must be submitted to the State Engineer in writing and contain:

(a) The location of the proposed well by public land survey, county assessor’s parcel number, map of the vicinity and plat map;

(b) The project and contract number, if applicable;

(c) The total amount of water that will be ~~consumed~~ *pumped from the well* each day;

(d) The name, address and telephone number of the person responsible for plugging the well, and the name, address and telephone number of the owner of the land where the well will be located if the owner is not the person responsible for plugging the well;

(e) A notarized affidavit, on a form prescribed by the Division, ~~{which indicates}~~ *from* the person who will be responsible for plugging the well upon abandonment ~~{and which is signed by:~~

~~——(1) For private lands, the person or an authorized employee of the company that is the owner of record of the property; or~~

~~——(2) For public lands, the person or an authorized employee of the company that has the appropriate authorization to use the public lands;~~

~~——(f) For private lands, written authorization to access the project area from the person or an authorized employee of the company that is the owner of record of the property and for public lands, a copy of the written authorization from the appropriate agency that has granted the right to use the public lands;~~

~~——(g)} *acknowledging that responsibility;*~~

(f) The name, address and telephone number of a person who will be available to answer questions concerning the project; and

~~{(h)}~~ *(g)* The date the project is scheduled to be completed.

2. A waiver to drill a well in a shallow groundwater system for removing water for the purpose of alleviating potential hazards to persons and property resulting from the rise of groundwater caused by secondary recharge will bear a unique number preceded by the letters “DW.” The notice of intent to drill submitted to the Division pursuant to NAC 534.320 and the

~~record of work~~ *Well Driller's Report* submitted to the Division pursuant to NRS 534.170 must bear this number.

3. A copy of the waiver must be in the possession of the well driller at the drill site.

4. The well must be plugged in the manner prescribed in NAC 534.420 *or authorized pursuant to NAC 534.422* within 3 days after the completion of the project.

5. The water from the well may not be used for any purpose other than the purpose set forth in the waiver without the written approval of the State Engineer.

6. Written authorization from the appropriate agency for the discharge of dewatering water must be submitted with the waiver request.

7. A waiver will not be granted pursuant to this section if the State Engineer determines that the quantity of water requested will adversely affect or impair existing water rights or domestic wells.

Sec. 47. NAC 534.449 is hereby amended to read as follows:

534.449 1. The owner of a well, other than a well drilled for domestic use, who wishes to obtain a waiver pursuant to subsection 7 or 8 of NRS 534.060 from the requirement that a well be plugged must submit a written request for the waiver to the State Engineer. The State Engineer ~~will~~ *may, for good cause shown,* grant such a waiver . ~~which~~ *The State Engineer will not grant such a waiver if the State Engineer determines that the well is dry or abandoned. The waiver* is valid for 1 year after the date on which the waiver is ~~requested unless the State Engineer finds that the well is dry or abandoned.~~ *approved.* On or before the date on which the waiver is no longer valid, the owner of the well may submit a request to extend the waiver or to make the waiver permanent, if appropriate, as determined by the State Engineer.

2. A request for a waiver, the extension of a waiver or to make a waiver permanent made pursuant to subsection 1 must:

(a) Be made on a form provided by the State Engineer;

(b) Include sufficient information and evidence for the State Engineer to determine that the well is not in any manner defective, including, without limitation, that the conditions set forth in subsection 2 of NAC 534.427 do not apply to the well; ~~and~~

(c) ~~A~~ **Include a** notarized affidavit, on a form prescribed by the Division, ~~which indicates~~ **from** the person who will be responsible for plugging the well upon abandonment ~~and which is signed by:~~

~~— (1) For private lands, the person or an authorized employee of the company that is the owner of record of the property; or~~

~~— (2) For public lands, the person or an authorized employee of the company that has the appropriate authorization to use the public lands.]~~ **acknowledging that responsibility; and**

(d) Provide evidence that the well would be useful as a site for monitoring groundwater.

Sec. 48. NAC 534.450 is hereby amended to read as follows:

534.450 1. Except as otherwise provided in subsection 2, the State Engineer may, for good cause shown, waive a requirement of the provisions of this chapter.

2. The State Engineer will not waive the requirements set forth in subsection 4 of NAC 534.360.

3. A request for a waiver of a requirement of this chapter must be made in writing **to the State Engineer** and include:

(a) A detailed statement of the reason for requesting the waiver and the section of ~~the regulations~~ **this chapter** to be waived;

- (b) The location or proposed location of the well by public land survey;
 - (c) The name and address of the owner of the well;
 - (d) The street address of the location of the well or, if there is no street address, a description of the location of the proposed well, including, but not limited to, common landmarks and cross-streets near the location of the well;
 - (e) The county assessor's parcel number for the location of the proposed well;
 - (f) A description of the proposed design and a sectional drawing of the proposed well that includes the depths to the aquifers, the locations of the screens and seals and the materials that will be used;
 - (g) A notarized affidavit, on a form prescribed by the Division, ~~{which indicates}~~ *from* the person who will be responsible for plugging the well upon abandonment ~~{and which is signed by:~~
 - ~~—(1) For private lands, the person or an authorized employee of the company that is the owner of record of the property; or~~
 - ~~—(2) For public lands, the person or an authorized employee of the company that has the appropriate authorization to use the public lands;}~~ *acknowledging that responsibility;*
 - (h) Any available data to categorize the hydraulic heads, water quality and permeability characteristics of the aquifer; *and*
 - (i) ~~{A monitoring plan; and~~
 - ~~{j}~~ Any other information required pursuant to the provisions of this chapter.
4. After reviewing the request, the State Engineer will issue a written notice of his or her decision to the ~~{owner of the well.}~~ *responsible party.*

5. Each waiver will bear a unique number preceded by the letter “R.” The notice of intent to drill submitted to the Division pursuant to NAC 534.320 and the ~~record of work~~ *Well Driller’s Report* submitted to the Division pursuant to NRS 534.170 must bear this number.

6. The well driller shall ensure that the well complies with the provisions of the waiver and have a copy of the waiver in the well driller’s possession when he or she drills the well.

7. The water from the well may not be used for any purpose other than the purpose set forth in the waiver without the written approval of the State Engineer.

Sec. 49. NAC 534.500 is hereby amended to read as follows:

534.500 1. The Division shall assess demerit points against the license of a licensed well driller who is found by the State Engineer to have violated any provision of this chapter or chapter 534 of NRS pursuant to the following table:

Classification of Violations	Maximum Demerits
Notice of Intent/Approval	
Failing to submit a notice of intent to drill to the Division as required by NAC 534.320.....	25
Failing to notify the Division or obtain approval from the Division as required by NAC 534.370 if drilling is suspended or drilling equipment is moved from the drilling site before a well is completed or plugged.....	75
Log or Record of Work of Well Driller <i>Driller’s Report</i>	
Failing to furnish a copy of a log or record of work <i>Well Driller’s</i> 75

Classification of Violations

Maximum

Demerits

Report to the State Engineer as required by NRS 534.170, intentionally making a material misstatement of fact in a ~~log or record of work~~ *Well Driller's Report* submitted to the State Engineer pursuant to NRS 534.170 or intentionally making a material misstatement of fact in an amendment to a ~~log or record of work~~ *Well Driller's Report* submitted to the State Engineer pursuant to NRS 534.170

Submitting a ~~log or record of work~~ *Well Driller's Report* to the State Engineer pursuant to NRS 534.170 more than 30 days after a well is completed 10

Submitting a ~~log or record of work~~ *Well Driller's Report* to the Division pursuant to NAC 534.420 more than 30 days after a water well has been plugged 10

Licenses

Intentionally making a material misstatement of fact in an application for a well-drilling license..... 100

A well driller failing to have the well driller's license card in his or her possession at a drilling site or failing to produce the license card when requested to do so by a representative of the Division as required by NAC 534.330 10

Failing to have a licensed well driller at a well-drilling site when a drill 50

Classification of Violations

Maximum

Demerits

rig is in operation or when any activity involving the construction , *rehabilitation, reconditioning* or plugging of the well is conducted as required by NAC 534.330. (Demerit points will be assessed against the license of the principal well driller for the well-drilling company and against the license of the well driller listed on the notice of intent ~~to~~ *to drill*.).....

Well construction and plugging

Failing to comply with any provision of this chapter which establishes standards for the construction , *rehabilitation, reconditioning* or plugging of a well, including, without limitation, improperly placing the annular seal, constructing a well with substandard well casing, using improper products or procedures during the construction , *rehabilitation, reconditioning* or plugging of a well and failing to protect against contamination..... 75

Failing to make a well accessible to measurements of the water level of the well as required by NAC 534.430 30

Failing to prevent, control or stop the flow of water from an artesian well as required by NRS 534.060 and NAC 534.378..... 30

Approvals

Drilling a replacement well more than 300 feet from the location of the existing point of diversion described in the permit , *waiver or* 25

Classification of Violations

Maximum
Demerits

certificate or moving the replacement well outside of the 40-acre
subdivision described in the permit, waiver or certificate of water
right in violation of NAC 534.300

Failing to comply with any term or condition of a permit, waiver or
order issued by the State Engineer concerning the drilling *or*
plugging of a well as required by NAC 534.330, including, without
limitation, the depth of the annular seal, the location of perforations
and the minimum or maximum depth of the well 50

Miscellaneous

Any other violation of any of the provisions of this chapter or chapter
534 of NRS To be
determined
by the
Division
based on
the severity
of the
violation,
but not to
exceed ~~10~~
100

Classification of Violations

Maximum

Demerits

2. The Division shall assess demerit points against the license of a well driller only:

(a) After the State Engineer makes a finding that the well driller has violated a provision of this chapter or chapter 534 of NRS as provided in subsection 1;

(b) After the Division gives written notice of an alleged violation to the well driller by registered or certified mail to the last known address of the well driller which specifies the provision of this chapter or chapter 534 of NRS that the well driller is alleged to have violated;

(c) If, within 30 days after the date on which the well driller receives a notice of an alleged violation sent pursuant to paragraph (b), the well driller has failed to respond to the notice of an alleged violation or provides a response to the notice of an alleged violation that is unsatisfactory, as determined by the Division; and

(d) After the conditions set forth in paragraphs (a), (b) and (c) are satisfied, regardless of when the violation occurred.

3. If a licensed well driller accumulates 100 or more demerit points, the State Engineer may, after giving notice and holding a hearing pursuant to NRS 534.160 to determine that the violations which resulted in the demerit points occurred, suspend the license of the well driller indefinitely. If the State Engineer suspends the license of a well driller, the Division shall notify the well driller that his or her license is suspended and the well driller is prohibited from engaging in any activity for which a well-drilling license issued pursuant to NRS 534.140 is required until the license of the well driller is reinstated.

4. A well driller whose license has been suspended pursuant to subsection 3 may have the license reinstated if the well driller:

- (a) Satisfies the requirements set forth in *subsection 2 of* NAC 534.293;
- (b) Appears before the State Engineer at a hearing and the State Engineer finds that the well driller is competent to engage in the practice of well drilling in the State of Nevada; and
- (c) Resolves any outstanding complaints related to his or her license as a well driller to the satisfaction of the Division.

5. The Division shall reduce the number of demerit points accumulated against the license of a well driller whose license has been suspended pursuant to subsection 3 and reinstated pursuant to subsection 4 to zero.

6. Demerit points assessed against the license of a well driller may be removed by the Division as follows:

(a) Five demerit points may be removed for each credit unit of continuing education approved by the Division and successfully completed by the well driller, as determined by the Division up to a maximum of 50 points per year. The credit units of continuing education that must be completed for the purposes of the removal of demerit points pursuant to this paragraph are in addition to those required by NAC 534.2923.

(b) One-half of the demerit points assessed against the license of a well driller may be removed if the well driller is determined by the State Engineer to not have violated a provision of this chapter or chapter 534 of NRS for the entire year before his or her license is required to be renewed pursuant to NRS 534.140.

(c) Twenty demerit points may be removed if the well driller takes and passes the written examination ~~[section of the examination]~~ for a license as a well driller. The Division may remove demerit points pursuant to this paragraph once every other year.

Sec. 50. NAC 534.296, 534.298 and 534.4465 are hereby repealed.

TEXT OF REPEALED SECTIONS

534.296 Temporary license: Issuance and reissuance; expiration; termination of employment of temporary licensee. (NRS 534.020, 534.110, 534.140)

1. Except as otherwise provided in subsection 6, the State Engineer may issue a temporary well-drilling license to an employee of a drilling contractor if the drilling contractor has insufficient personnel to complete existing contracts and a valid application for a well-drilling license for the employee has been submitted to the Division pursuant to NAC 534.280.

2. When the sponsoring well driller submits a request for a temporary license, the sponsoring well driller must:

(a) Hold a well-drilling license issued by the State Engineer; and

(b) Sign and submit a letter to the Division containing:

(1) A request that the person named in the application be given a temporary license;

(2) A statement that the sponsoring well driller will take full responsibility for the drilling performed by the prospective temporary licensee; and

(3) A statement that the prospective temporary licensee will comply with all regulations for drilling wells.

3. The State Engineer will evaluate the qualifications of the prospective temporary licensee and, except as otherwise provided in subsection 4, may issue or reissue a temporary license.

4. The State Engineer will not:

(a) Issue or reissue a temporary license if the applicant has an expired application or has had an application denied by the State Engineer pursuant to subsection 2 of NAC 534.282;

(b) Reissue a temporary license if the applicant has not obtained a passing score as set forth in NAC 534.282 on the written section of the examination; or

(c) Reissue a temporary license if, after the oral examination conducted by the Board pursuant to NAC 534.286, the Board determines that the applicant is not qualified to drill a well without the on-site supervision of a well driller licensed in this State.

5. The sponsoring well driller shall inform the Division in writing if the employment of the temporary licensee is terminated before the date of the next available examination. The sponsoring well driller is responsible for any drilling performed by the temporary licensee until the notice of termination is received by the Division. The notice of termination must explain the reasons for terminating the employment of the temporary licensee. The temporary license expires upon receipt of the notice by the Division.

6. Not more than five temporary licenses may be issued under a well-drilling license.

534.298 Temporary license: Period of validity; authorized activities; transferability.
(NRS 534.020, 534.110, 534.140) A temporary well-drilling license:

1. Is valid until the next scheduled examination;

2. Authorizes well drilling to be performed only for the contractor who requested the license; and

3. Is not transferable.

534.4465 Waiver to use water to drill for water well. (NRS 534.020, 534.050, 534.110)

1. A request for a waiver to allow the temporary use of water from an existing well to drill for a water well, or to drill a temporary well and use the water from the temporary well to drill for a water well, must be submitted to the State Engineer in writing and contain:

(a) The location of the existing well or the proposed temporary well, as applicable, and the water well to be drilled by public land survey, county assessor's parcel number, map of the vicinity and plat map;

(b) The total amount of water that will be consumed from the existing well or temporary well each day;

(c) The date the project is scheduled to be completed;

(d) The name, address and telephone number of the person responsible for plugging the existing well or temporary well, as applicable, and the name, address and telephone number of the owner of the land if the owner of the land is not the person who is responsible for plugging the existing well or temporary well;

(e) A notarized affidavit, on a form prescribed by the Division, which indicates the person who will be responsible for plugging the existing well or temporary well, as applicable, upon abandonment and which is signed by:

(1) For private lands, the person or an authorized employee of the company that is the owner of record of the property; or

(2) For public lands, the person or an authorized employee of the company that has the appropriate authorization to use the public lands;

(f) For private lands, written authorization to access the project area from the person or an authorized employee of the company that is the owner of record of the property or for public lands, a copy of the written authorization from the appropriate agency that has granted the right to use the public lands; and

(g) The name, address and telephone number of a person who will be available to answer questions concerning the existing well or temporary well, as applicable.

2. A waiver that allows the temporary use of water from an existing well or to drill a temporary well will bear a unique number preceded by the letters “WE.” The notice of intent to drill submitted to the Division pursuant to NAC 534.320 and the record of work submitted to the Division pursuant to NRS 534.170 must bear this number.

3. A copy of the waiver must be in the possession of the well driller at the drill site.

4. The existing well or temporary well, as applicable, must be plugged in the manner prescribed in NAC 534.420 within 3 days after the completion of the project.

5. Water from the existing well or temporary well may not be used for any purpose other than the purpose set forth in the waiver without the written approval of the State Engineer.