PROPOSED REGULATION OF THE

STATE ENVIRONMENTAL COMMISSION

LCB File No. R101-16

August 9, 2016

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

AUTHORITY: §§1-15, 17-32, 37 and 38, NRS 445A.425; §16, NRS 445A.425 and 445A.430; §33, NRS 445A.425 and 445A.465; §34, NRS 445A.425, 445A.430 and 445A.465; §§35 and 36, NRS 445A.425, 445A.465 and 445A.495.

A REGULATION relating to water pollution controls; revising and adding certain definitions; limiting the application of the provisions for the use of reclaimed water; adding a new category of reuse for reclaimed water; adopting water quality standards for reuse category A+; requiring a person proposing to use reclaimed water in reuse category A+ for indirect potable reuse to conduct certain public notice and comment activities; requiring such a person to include certain material in the application for a discharge permit; requiring reclaimed water intended for indirect potable reuse achieved through certain measures to meet additional water quality requirements; providing for crediting certain treatment processes and the underground retention of reclaimed water with certain levels of pathogen reduction; adopting new fees for the discharge of reclaimed water through a spreading basin; revising the volume capacity for on-site sewage disposal systems that are classified as Class V wells; authorizing additional uses for certain categories of reclaimed water; requiring an application for a permit to inject fluids through an injection well for indirect potable reuse to meet certain requirements; adopting new fees for an application for a permit for an injection well associated with a reclaimed water project; authorizing a person who holds an expired permit to continue operating under certain conditions; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Existing law authorizes the State Environmental Commission to adopt regulations relating to water pollution control and standards for water quality. (NRS 445A.425) Under existing regulations, the Commission has established requirements for the use of treated effluent in reuse categories A, B, C, D and E. (NAC 445A.274 - 445A.280) **Sections 7 and 38** of this regulation eliminate the term "treated effluent" and replace it with the term "reclaimed water." **Sections 17-30** of this regulation make conforming changes.

Sections 11 and 12 of this regulation add a new reuse category for reclaimed water, A+, which requires higher standards of treatment and may be used for indirect potable reuse.

Sections 2-6, 8 and 9 of this regulation add new definitions related to reuse category A+ water. **Section 13** of this regulation requires that a person who proposes to use reclaimed water in reuse category A+ for indirect potable reuse must hold at least one public workshop and provide for public notice and comment on the proposed use. Furthermore, **section 14** of this regulation requires the person to submit, along with the application for a discharge permit, proof that the proposal for indirect potable reuse meets certain additional requirements. **Section 15** of this regulation sets forth additional requirements for reclaimed water in reuse category A+ intended for indirect potable reuse that is achieved through the use of a spreading basin or injection well and provides that the Division of Environmental Protection of the State Department of Conservation and Natural Resources may credit an applicant with certain amounts of pathogen reduction for treatment processes and the underground retention of reclaimed water.

Section 10 of this regulation provides that the new provisions for the use of reclaimed water do not apply to any return flow credits for the Colorado River, activities related to the Colorado River that are governed by federal law, decree or judicial precedent or other credits administered by the United States Bureau of Reclamation.

Section 19 of this regulation prohibits any person from using reclaimed water in an enclosed area to maintain a controlled temperature and humidity environment. **Section 20** of this regulation requires pipe infrastructure and reclaimed water outlets to be identified as such. **Section 20** also requires that an unrestricted pond using reclaimed water in certain reuse categories must be fenced. **Section 24** of this regulation provides additional activities for which reclaimed water in reuse category A may be used, which include snowmaking, irrigation of food crops, outdoor water features, commercial toilet and urinal flushing and outdoor commercial window washing and pressure cleaning. **Section 25** of this regulation provides additional activities for which reclaimed water in reuse category B may be used, which include commercial chemical mixing, hydroseeding and street sweeping.

Existing law authorizes the Commission to establish certain fees for a permit for the discharge of pollutants into the waters of the State. (NRS 445A.430) Existing regulation establishes fees for the discharge of treated effluent. (NAC 445A.232) **Section 16** of this regulation renames this category to "discharge of reclaimed water other than through a spreading basin" and adds a new category of fees for the discharge of reclaimed water through a spreading basin.

Under existing law, the Commission is authorized to adopt regulations for the control of injection wells and to establish fees for the injection of fluids through a well into the waters of this State. (NRS 445A.425, 445A.430, 445A.465, 445A.490) **Section 31** of this regulation revises the definition of "degrade" to include causing or creating an increase in the amount or concentration of a substance in an underground source of drinking water that results in a violation of a regulation prescribing secondary maximum contaminant levels. **Section 32** of this regulation increases the volume capacity for on-site sewage disposal systems that are classified as Class V wells from 3,000 to 5,000 gallons per day. **Section 33** of this regulation requires an application for a permit to inject fluids through an injection well for indirect potable reuse to satisfy the applicable requirements for the use of reclaimed water. **Section 34** of this regulation establishes new fees for an application for a permit for an injection well associated with a reclaimed water project, based on the volume of water injected daily, and for annual services,

major modifications or the renewal of such a permit. **Section 35** of this regulation provides that if the permit of a person has expired and that person submitted a timely application for a permit, the person may continue to operate under the expired permit until the Director takes action, unless there are certain deficiencies or compliance issues with the permit or the application for the permit.

Section 1. Chapter 445A of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 15, inclusive, of this regulation.

Sec. 2. ***"Augmentation" has the meaning ascribed to it in NRS 534.0125.***

Sec. 3. ***"Environmental buffer" means a naturally occurring zone that provides sufficient retention time for reclaimed water before the reclaimed water is recovered into an extraction well for potable use.***

Sec. 4. ***"Food crop" means any agricultural product that is grown for human consumption.***

Sec. 5. ***"Indirect potable reuse" means the discharge of reclaimed water into an aquifer for the purpose of augmentation or recharge of a drinking water source where the reclaimed water travels through an environmental buffer before the reclaimed water is recovered into an extraction well for potable use.***

Sec. 6. ***"Log" means the removal value measuring the ability of a treatment process to remove pathogenic microorganisms, which is determined by taking the logarithm of the ratio of pathogen concentration in the influent and effluent water of a treatment process. For example, 1 log is equal to a 90 percent reduction of pathogenic microorganisms; 2 log is equal to a 99 percent reduction of pathogenic microorganisms; 3 log is equal to a 99.9 percent reduction of pathogenic microorganisms. Log is calculated using the equation below:***

$$Log = Log_{10}\left[\frac{Influent\ Pathogen\ Concentration}{Effluent\ Pathogen\ Concentration}\right]$$

Sec. 7. *"Reclaimed water" means sewage that has been treated by a physical, biological or chemical process, which is intended for a use identified in NAC 445A.276 to 445A.2771, inclusive, and section 11 of this regulation and that meets the corresponding water quality criteria for the specified use. The term does not include graywater.*

Sec. 8. *"Spreading basin" means a surface impoundment used for the percolation of reclaimed water through an environmental buffer into an aquifer for indirect potable reuse.*

Sec. 9. *"Unregulated constituent" means a constituent that does not have any adopted standards or advisory concentrations or levels.*

Sec. 10. *The provisions of NAC 445A.274 to 445A.280, inclusive, and sections 2 to 15, inclusive, of this regulation, are not applicable to:*

1. Colorado River return flow credits governed by federal decree;

2. Any activities related to the Colorado River that are governed by federal law, contracts or judicial precedents; or

3. Any credits administered by the United States Bureau of Reclamation.

Sec. 11. *Reclaimed water that meets the requirements for water quality set forth in section 12 of this regulation for reuse category A+ may be used for:*

1. Indirect potable reuse through injection wells or spreading basins; or

2. Any activity approved for reuse category A, B, C, D or E.

Sec. 12. *1. Reclaimed water that is used for an activity approved for reuse category A+ must meet the following water quality requirements:*

(a) The provisions of the "National Primary Drinking Water Regulations" and related federal regulations adopted by reference in NAC 445A.4525.

(b) The secondary maximum contaminant levels specified in NAC 445A.455.

(c) Twelve-log enteric virus reduction, which must be demonstrated from the point where raw sewage enters a treatment works to the point of extraction from an aquifer for potable use.

(d) Ten-log Giardia lamblia cyst reduction and ten-log Cryptosporidium oocyst reduction, which must be demonstrated from the point where raw sewage enters a treatment works to the zone of saturation.

2. Where reclaimed water in reuse category A+ is used for indirect potable reuse, the point of compliance for paragraphs (a) and (b) of subsection 1 is the zone of saturation.

Sec. 13. *In addition to the requirements set forth in NAC 445A.275 and sections 14 and 15 of this regulation, any person who proposes to use reclaimed water that meets the requirements for water quality for reuse category A+ specified in section 12 of this regulation for indirect potable reuse shall:*

1. Schedule and hold at least one public workshop concerning the proposed indirect potable reuse.

2. Provide notice of the person's intent to hold at least one public workshop in a manner designed to inform persons who are potentially interested of the proposed indirect potable reuse. Such notice must be:

(a) Circulated within the geographical area of the proposed indirect potable reuse by publishing in a local newspaper or periodical or, if the local newspaper is not a daily newspaper, in a daily newspaper of general circulation; and

(b) Mailed to any person or group upon request.

3. Provide a period of not less than 30 days following the date of the public notice during which time interested persons may submit their written comments with respect to the proposed indirect potable reuse.

4. Submit all written comments received pursuant to subsection 3 and all written responses to such comments to the Division along with an application for a discharge permit required pursuant to section 14 of this regulation for consideration by the Division in the formulation of the permit.

Sec. 14. *A person who proposes to use reclaimed water for indirect potable reuse must submit for the review and approval of the Division with his or her application for a discharge permit:*

1. Proof that the applicant has complied with the requirements of section 13 of this regulation for a public workshop and public notice.

2. An engineering report bearing the stamp of a professional engineer who is licensed in this State.

3. A plan for the development of a monitoring program for unregulated constituents. The plan must examine surrogates and indicators to meet specific reduction goals for unregulated constituents.

4. Evidence that the reclaimed water, treatment system and treatment processes to be used will meet the requirements of section 15 of this regulation. If the applicant is seeking credit for the treatment processes or the amount of time the reclaimed water is retained underground, the Division may credit the applicant for the appropriate log reduction based on such evidence.

5. Proof that the applicant has assessed the wastewater source control for the production and use of reclaimed water in reuse category A+.

6. Proof of the applicant's financial ability to:

(a) Pay the costs related to maintenance, operations, depreciation and capital expenses of the system; and

(b) Establish and maintain adequate fiscal controls and accounting methods required for the operation of the system.

7. Proof that the applicant has obtained written approval from the appropriate district board of health in support of the proposed use.

Sec. 15. *In addition to the requirements for water quality specified in section 12 of this regulation, reclaimed water in reuse category A+ that is intended for indirect potable reuse achieved through the use of:*

1. A spreading basin must meet the minimum requirements for bacteriological quality for reuse category A before the reclaimed water is discharged to the spreading basin. For each month such reclaimed water is retained underground, the Division may credit the reclaimed water with 1-log enteric virus reduction. The Division may credit the reclaimed water with up to 10-log Giardia lamblia cyst reduction and up to 10-log Cryptosporidium oocyst reduction for treatment within the vadose zone. The point of compliance is the point of extraction.

2. An injection well must pass through a minimum of three separate treatment processes for pathogen removal. A treatment process may be credited with a maximum of 6-log reduction and a minimum of 1-log reduction. For Giardia lamblia cyst reduction and Cryptosporidium oocyst reduction, the point of compliance is at the point of injection. For each month such reclaimed water is retained underground, the Division may credit the

reclaimed water with 1-log enteric virus reduction. The point of compliance is the point of extraction.

Sec. 16. NAC 445A.232 is hereby amended to read as follows:

445A.232 1. Except as otherwise provided in subsections 2 and 7, a nonrefundable application fee must accompany each original application for a permit, each application for a modification to a permit, other than a minor modification made pursuant to NAC 445A.263, and each application to renew a permit which is submitted to or required by the Director. The Director shall charge the following fees:

Type of Permit Issued	Application Fee	Fee for Annual Review and Services
DISCHARGE OF DOMESTIC WASTEWATER		
Less than 50,000 gallons daily	$1,000	$1,000
50,000 gallons or more but less than 250,000 gallons daily	1,500	1,500

Type of Permit Issued	Application Fee	Fee for Annual Review and Services
250,000 gallons or more but less than 500,000 gallons daily	2,000	2,000
500,000 gallons or more but less than 1,000,000 gallons daily	3,000	3,000
1,000,000 gallons or more but less than 2,000,000 gallons daily	4,000	4,000
2,000,000 gallons or more but less than 5,000,000 gallons daily	6,000	6,000
5,000,000 gallons or more but less than 10,000,000 gallons daily	10,000	10,000
10,000,000 gallons or more but less than 20,000,000 gallons daily	10,000	20,000

Type of Permit Issued	Application Fee	Fee for Annual Review and Services
20,000,000 gallons or more but less than 40,000,000 gallons daily	10,000	30,000
40,000,000 gallons or more daily	10,000	40,000
DISCHARGE OF ~~[~~TREATED ~~EFFLUENT]~~ ***RECLAIMED WATER OTHER THAN THROUGH A SPREADING BASIN***		
Less than 50,000 gallons daily	$750	$750
50,000 gallons or more but less than 250,000 gallons daily	1,000	1,000
250,000 gallons or more but less than 500,000 gallons daily	1,250	1,250

Type of Permit Issued	Application Fee	Fee for Annual Review and Services
500,000 gallons or more but less than 1,000,000 gallons daily	1,500	1,500
1,000,000 gallons or more but less than 10,000,000 gallons daily	2,000	2,000
10,000,000 gallons or more but less than 20,000,000 gallons daily	2,500	2,500
20,000,000 gallons or more but less than 40,000,000 gallons daily	3,000	3,000
40,000,000 gallons or more daily	3,500	3,500

DISCHARGE OF RECLAIMED WATER

THROUGH A SPREADING BASIN

Type of Permit Issued	Application Fee	Fee for Annual Review and Services
Less than 10,000,000 gallons daily	***$10,000***	***$10,000***
10,000,000 gallons or more but less than 20,000,000 gallons daily	***10,000***	***20,000***
20,000,000 gallons or more but less than 40,000,000 gallons daily	***10,000***	***30,000***
40,000,000 gallons or more daily	***10,000***	***40,000***
DISCHARGE FROM REMEDIATION, DEWATERING, OTHER THAN A DISCHARGE TO GROUNDWATER FROM THE DEWATERING OF A MINE, OR FROM A POWER PLANT, A MANUFACTURING OR FOOD PROCESSING FACILITY OR ANY OTHER COMMERCIAL OR INDUSTRIAL		

Type of Permit Issued	Application Fee	Fee for Annual Review and Services
FACILITY		
Cooling water only	$2,000	$2,000
Less than 50,000 gallons of process water daily	2,500	2,500
50,000 gallons or more but less than 250,000 gallons of process water daily	3,000	3,000
250,000 gallons or more but less than 500,000 gallons of process water daily	4,000	4,000
500,000 gallons or more but less than 1,000,000 gallons of process water daily	5,000	5,000
1,000,000 gallons or more but less than		

Type of Permit Issued	Application Fee	Fee for Annual Review and Services
2,000,000 gallons of process water daily	6,000	6,000
2,000,000 gallons or more but less than 5,000,000 gallons of process water daily	8,000	8,000
5,000,000 gallons or more but less than 10,000,000 gallons of process water daily	10,000	10,000
10,000,000 gallons or more but less than 20,000,000 gallons of process water daily	10,000	20,000
20,000,000 gallons or more but less than 40,000,000 gallons of process water daily	10,000	30,000
40,000,000 gallons or more of process water daily	10,000	40,000

Type of Permit Issued	Application Fee	Fee for Annual Review and Services
DISCHARGE FROM A TREATMENT PLANT FOR DRINKING WATER		
Intermittent discharge of less than 100,000 gallons daily	$500	$500
Intermittent discharge of 100,000 gallons or more but less than 1,000,000 gallons daily	750	750
Intermittent discharge of 1,000,000 gallons or more daily	1,000	1,000
Routine discharge of less than 100,000 gallons daily	500	500
Routine discharge of 100,000 gallons or more but less than 1,000,000 gallons daily	750	750

Type of Permit Issued	Application Fee	Fee for Annual Review and Services
Routine discharge of 1,000,000 gallons or more daily	1,000	1,000
DISCHARGE OF WASTEWATER FROM A CONCENTRATED ANIMAL FEEDING OPERATION		
Less than 100,000 gallons daily	$1,500	$1,500
100,000 gallons or more but less than 500,000 gallons daily	2,000	2,000
500,000 gallons or more daily	2,500	2,500
PERMIT FOR A CONCENTRATED ANIMAL FEEDING OPERATION		

Type of Permit Issued	Application Fee	Fee for Annual Review and Services
THAT DOES NOT DISCHARGE WASTEWATER		
Area of a holding facility that is less than 10 acres	$1,500	$1,500
Area of a holding facility that is 10 acres or more but less than 20 acres	2,000	2,000
Area of a holding facility that is 20 acres or more	2,500	2,500
DISCHARGE FROM A FISH HATCHERY		
Less than 500,000 gallons daily	$750	$750
500,000 gallons or more but less than		

Type of Permit Issued	Application Fee	Fee for Annual Review and Services
2,500,000 gallons daily	1,000	1,000
2,500,000 gallons or more daily	1,500	1,500
OTHER PERMITTED DISCHARGES		
Less than 50,000 gallons daily	$1,000	$1,000
50,000 gallons or more but less than 250,000 gallons daily	1,500	1,500
250,000 gallons or more but less than 500,000 gallons daily	3,000	3,000
500,000 gallons or more but less than 1,000,000 gallons daily	5,000	5,000

Type of Permit Issued	Application Fee	Fee for Annual Review and Services
1,000,000 gallons or more but less than 10,000,000 gallons daily	10,000	10,000
10,000,000 gallons or more but less than 35,000,000 gallons daily	10,000	20,000
35,000,000 gallons or more daily	10,000	30,000
REUSE OF SEWAGE SLUDGE		
Less than 20,000 cubic yards per year	$1,500	$1,500
20,000 cubic yards or more per year	3,000	3,000
REUSE OF DOMESTIC SEPTAGE	$1,000	$1,000

Type of Permit Issued	Application Fee	Fee for Annual Review and Services
DISCHARGE FROM A RECREATIONAL LAKE	$5,000	$5,000
TEMPORARY PERMIT	$250	Not Applicable

2. Except as otherwise provided in this subsection and subsection 7, a nonrefundable application fee must accompany each original application for a permit and each application to renew a permit for the discharges set forth in this subsection that is submitted to or required by the Director. The Director shall charge the following fees:

Type of Discharge Permitted	Application Fee for Original Permit	Application Fee for Renewal of Permit	Fee for Annual Review and Services

Type of Discharge Permitted	Application Fee for Original Permit	Application Fee for Renewal of Permit	Fee for Annual Review and Services
DISCHARGE TO GROUNDWATER FROM THE DEWATERING OF A MINE			
Cooling water only	$625	$315	$1,000
Less than 50,000 gallons of dewatering water daily	625	315	1,500
50,000 gallons or more but less than 1,000,000 gallons of dewatering water daily	875	440	2,000
1,000,000 gallons or more but less than 5,000,000 gallons of dewatering water daily	1,000	500	2,500
5,000,000 gallons or more of			

Type of Discharge Permitted	Application Fee for Original Permit	Application Fee for Renewal of Permit	Fee for Annual Review and Services
dewatering water daily	1,250	625	3,000
MINING			
Physical separation facility discharging wash water where no chemicals are added for metallurgical recovery	$500	$500	$250
Mining facility designed to chemically process less than 18,250 tons per year or a pilot testing facility	500	500	250
Mining facility designed to chemically process 18,250 tons per year			

Type of Discharge Permitted	Application Fee for Original Permit	Application Fee for Renewal of Permit	Fee for Annual Review and Services
or more but less than 36,500 tons per year	1,500	1,500	2,000
Mining facility designed to chemically process 36,500 tons per year or more but less than 100,000 tons per year	4,000	4,000	4,000
Mining facility designed to chemically process 100,000 tons per year or more but less than 500,000 tons per year	6,000	6,000	8,000
Mining facility designed to chemically process 500,000 tons per year			

Type of Discharge Permitted	Application Fee for Original Permit	Application Fee for Renewal of Permit	Fee for Annual Review and Services
or more but less than 1,000,000 tons per year	10,000	10,000	10,000
Mining facility designed to chemically process 1,000,000 tons per year or more but less than 2,000,000 tons per year	14,000	14,000	14,000
Mining facility designed to chemically process 2,000,000 tons per year or more	20,000	20,000	20,000
Monitoring of closed facilities	250	250	500
RUNOFF OF STORM WATER			
Industrial or commercial			

Type of Discharge Permitted	Application Fee for Original Permit	Application Fee for Renewal of Permit	Fee for Annual Review and Services
facility, including any structure, that is 5 acres to 10 acres, inclusive, in size	$300	$150	$750
Industrial or commercial facility, including any structure, that is more than 10 acres but less than 25 acres in size	600	300	750
Industrial or commercial facility, including any structure, that is more than 25 acres in size	1,000	500	750
Municipality whose population is 250,000 or less	600	300	750
Municipality whose population is more than 250,000	1,000	500	1,000

3. To determine the number of acres of a holding facility for an application fee or a fee for the annual review and services for a permit issued to a concentrated animal feeding operation that does not discharge wastewater, the Director shall multiply the number of animals in the concentrated animal feeding operation by .0023.

4. An application fee or a fee for the annual review and services charged pursuant to subsection 1 must be based upon the limit of flow, in gallons per day, of the discharge authorized in the permit.

5. The application fee for a permit with a term of less than 5 years must be reduced by the Director in accordance with the term of the permit, but in no case may the fee be reduced by an amount equal to more than one-third of the fee set forth in this section.

6. If required, the fee for the annual review and services must be:

(a) Submitted to the Division on or before July 1 of each year; and

(b) Paid in advance for the period of review that relates to the fiscal year following payment.

7. If a storm water runoff permit is not required, the Director may refund the application fee for the permit.

8. On July 1, 2002, and on July 1 of each even-numbered year thereafter, up to and including July 1, 2010, the Director shall increase by 5 percent each fee for the annual review and services set forth in subsection 1. To determine the amount of each fee that is due on or after July 1, 2002, the Director shall multiply the fee set forth in subsection 1 by:

(a) For the fees due on July 1, 2002, and July 1, 2003, 1.05;

(b) For the fees due on July 1, 2004, and July 1, 2005, 1.1025;

(c) For the fees due on July 1, 2006, and July 1, 2007, 1.1576;

(d) For the fees due on July 1, 2008, and July 1, 2009, 1.2155; and

(e) For the fees due on or after July 1, 2010, 1.2763.

➥ In establishing the annual fee for the review and services pursuant to this subsection, the Director shall round to the nearest dollar.

9. The Director may allow a holder of a permit to pay any fee required by subsection 1 pursuant to a payment plan if the holder of the permit submits a petition to the Division, on a form prescribed by the Division, which demonstrates that the payment of the fee in a lump sum would cause financial hardship to the holder of the permit.

10. As used in this section:

(a) "Concentrated animal feeding operation" has the meaning ascribed to it in 40 C.F.R. § 122.23.

(b) "Domestic septage" has the meaning ascribed to it in 40 C.F. R. § 503.9.

(c) "Sewage sludge" has the meaning ascribed to it in 40 C.F.R. § 503.9.

Sec. 17. NAC 445A.274 is hereby amended to read as follows:

445A.274 As used in NAC 445A.274 to 445A.280, inclusive, ***and sections 2 to 15, inclusive, of this regulation,*** unless the context otherwise requires, the words and terms defined in NAC 445A.2741 to ~~[445A.2748,]~~ ***445A.2747,*** inclusive, ***and sections 2 to 9, inclusive, of this regulation*** have the meanings ascribed to them in those sections.

Sec. 18. NAC 445A.2741 is hereby amended to read as follows:

445A.2741 "Area of use" means a site, or an area of land, where ~~[treated effluent]~~ ***reclaimed water*** is in use pursuant to NAC 445A.274 to 445A.280, inclusive ~~[.]~~ ***, and sections 2 to 15, inclusive, of this regulation.***

Sec. 19. NAC 445A.275 is hereby amended to read as follows:

445A.275 1. A person shall not use ~~[treated effluent]~~ ***reclaimed water*** unless:

(a) The person has:

(1) Received the approval of the Division of a plan for the management of ~~[effluent;]~~ ***reclaimed water;*** and

(2) Obtained a permit pursuant to NAC 445A.228 to 445A.263, inclusive; and

(b) The ~~[treated effluent]~~ ***reclaimed water*** has received at least secondary treatment.

2. ***A person shall not use reclaimed water for maintaining a controlled temperature and humidity environment within an enclosed area.***

3. As used in this section:

(a) "Five-day inhibited biochemical oxygen demand" means the amount of dissolved oxygen required to stabilize the carbonaceous decomposable organic matter by aerobic bacterial action at 20 degrees centigrade for 5 days.

(b) "Plan for the management of ~~[effluent"]~~ ***reclaimed water"*** means:

(1) ~~[An effluent]~~ ***A reclaimed water*** management plan; or

(2) A site specific management plan.

(c) "Secondary treatment" means the treatment of sewage until the sewage has, calculated as a 30-day average:

(1) A 5-day inhibited biochemical oxygen demand concentration of 30 milligrams per liter or less;

(2) A total suspended solids concentration of 30 milligrams per liter or less; and

(3) A pH of 6.0 to 9.0 SU.

Sec. 20. NAC 445A.2752 is hereby amended to read as follows:

445A.2752 1. A person using ~~[treated effluent]~~ ***reclaimed water*** shall post signs along the outer perimeter of the:

(a) Area of use; and

(b) Buffer zone, if any.

2. The signs must provide reasonable notice to the general public that:

(a) ~~[Treated effluent]~~ ***Reclaimed water*** is in use; and

(b) Contact with the ~~[effluent]~~ ***reclaimed water*** should be avoided ~~[.]~~ ***, where applicable.***

3. Pipe infrastructure conveying the reclaimed water must be identified by:

(a) Color marking; or

(b) A metal tag.

4. All reclaimed water outlets, including, without limitation, hose connections, open ended pipes and faucets, must be appropriately identified at the point of use.

5. Any pond area which is not restricted and where reclaimed water is being used for an activity approved for reuse category B, C, D or E must be fenced in a manner that prevents climbing and access to the pond.

Sec. 21. NAC 445A.2754 is hereby amended to read as follows:

445A.2754 1. A person using ~~[treated effluent]~~ ***reclaimed water*** for irrigation shall not:

(a) Allow the ~~[effluent]~~ ***reclaimed water*** to run off the site being irrigated.

(b) Except as otherwise provided in NAC ***445A.2762 and*** 445A.2768, use ~~[treated effluent]~~ ***reclaimed water*** to irrigate ***food*** crops ***.*** ~~[intended for human consumption.]~~

2. A person using ~~[treated effluent]~~ ***reclaimed water*** for spray irrigation shall conduct the irrigation in a manner that inhibits the ~~[treated effluent]~~ ***reclaimed water*** spray from drifting beyond the area of use or the buffer zone, if any.

Sec. 22. NAC 445A.2756 is hereby amended to read as follows:

445A.2756 1. Except as otherwise provided in NAC 445A.2766, 445A.2768 and 445A.2771, the Division will establish the size of a buffer zone.

2. The inner boundary of a buffer zone is determined by measuring a distance equal to the size of the buffer zone from:

(a) A boundary line of the property on which the site is located;

(b) A sign posted pursuant to NAC 445A.2752 informing the public of the presence of ~~[treated effluent;]~~ ***reclaimed water;*** or

(c) Any point where the property is open to public access,

➥ as determined by the Division.

3. Except as otherwise provided in NAC 445A.2754, a buffer zone must be kept free of ~~[treated effluent.]~~ ***reclaimed water.***

Sec. 23. NAC 445A.276 is hereby amended to read as follows:

445A.276 1. ~~[Treated effluent]~~ ***Reclaimed water*** being used for an activity approved for a reuse category must meet the following requirements for bacteriological quality for that category:

	Total Coliform	Fecal Coliform			
	c.f.u. or mpn/100ml	c.f.u. or mpn/100ml			
Reuse Category	A	B	C	D	E
Maximum 30-day geometric mean	2.2	2.2	23	200	No Limit
Maximum daily	23	23	240	400	No Limit

number					

2. As used in this section, "c.f.u. or mpn/100ml" means colony forming units or most probable number per 100 milliliters of the ~~[treated effluent.]~~ ***reclaimed water.***

Sec. 24. NAC 445A.2762 is hereby amended to read as follows:

445A.2762 ~~[Treated effluent]~~ ***Reclaimed water*** that meets the requirements for bacteriological quality set forth in NAC 445A.276 for reuse category A may be used for:

1. Spray irrigation of land used as a cemetery, commercial lawn, golf course, greenbelt or park even if:

(a) Public access to the area of use is ~~[not controlled;]~~ ***unrestricted;*** and

(b) Human contact with the ~~[treated effluent]~~ ***reclaimed water*** can reasonably be expected to occur.

2. An impoundment in which swimming is prohibited even if:

(a) Public access to the impoundment is ~~[not controlled;]~~ ***unrestricted;*** and

(b) Human contact with the ~~[treated effluent]~~ ***reclaimed water*** can reasonably be expected to occur.

3. ***Snowmaking. The Division may require additional treatment before reclaimed water may be used for this purpose.***

4. Irrigation of food crops. The Division may require additional treatment before reclaimed water may be used for this purpose.

5. Outdoor decorative water features.

6. Commercial toilet and urinal flushing.

7. Commercial window washing and pressure cleaning which occurs outdoors.

8. Any activity approved for reuse category B, C, D or E.

~~[4.]~~ ***9.*** Any other use that is approved by the Division.

Sec. 25. NAC 445A.2764 is hereby amended to read as follows:

445A.2764 ~~[Treated effluent]~~ ***Reclaimed water*** that meets the requirements for bacteriological quality set forth in NAC 445A.276 for reuse category B may be used for:

1. Spray irrigation of land used as a cemetery, commercial lawn, golf course, greenbelt or park if:

(a) Public access to the area of use is ~~[controlled;]~~ ***restricted;*** and

(b) Human contact with the ~~[treated effluent]~~ ***reclaimed water*** cannot reasonably be expected to occur.

2. Subsurface irrigation of land used as a commercial lawn, greenbelt or park.

3. Cooling water in an industrial process.

4. Fire-fighting operations in an urban area if approved by the fire department, fire protection district or other fire-fighting agency in whose district the fire occurs.

5. ***Commercial chemical mixing, including, without limitation, the mixing of pesticides, herbicides and fertilizers.***

6. Hydroseeding.

7. Street sweeping.

8. Any activity approved for reuse category C, D or E.

~~[6.]~~ ***9.*** Any other use that is approved by the Division.

Sec. 26. NAC 445A.2766 is hereby amended to read as follows:

445A.2766 1. ~~[Treated effluent]~~ ***Reclaimed water*** that meets the requirements for bacteriological quality set forth in NAC 445A.276 for reuse category C may be used for:

(a) Spray irrigation of land used as a cemetery, golf course or greenbelt if:

(1) Public access to the area of use is ~~[controlled;]~~ ***restricted;***

(2) Human contact with the ~~[treated effluent]~~ ***reclaimed water*** does not occur; and

(3) A buffer zone of not less than 100 feet is maintained.

(b) Watering of nursery stock if public access to the area of use is ~~[controlled.]~~ ***restricted.***

(c) Establishment, restoration or maintenance of a wetland if public access to the wetland is ~~[controlled.]~~ ***restricted.***

(d) Washing ***and processing*** of ~~[gravel used in concrete mixing.]~~ ***aggregate and the production of concrete.***

(e) Feed water for a boiler.

(f) An impoundment if:

(1) Public access to the impoundment is ~~[controlled;]~~ ***restricted;*** and

(2) Human contact with the ~~[treated effluent]~~ ***reclaimed water*** cannot reasonably be expected to occur.

(g) Fire fighting of forest or other wildland fires if approved by the fire department, fire protection district or other fire-fighting agency in whose district the fire occurs.

(h) Any activity approved for reuse category D or E.

(i) Any other use that is approved by the Division.

2. As used in this section:

(a) "Nursery stock" has the meaning ascribed to it in NRS 555.23562.

(b) "Wetland" has the meaning ascribed to it in NRS 244.388.

Sec. 27. NAC 445A.2768 is hereby amended to read as follows:

445A.2768 1. ~~[Treated effluent]~~ ***Reclaimed water*** that meets the requirements for bacteriological quality set forth in NAC 445A.276 for reuse category D may be used for:

(a) Spray irrigation of land used for agricultural purposes if:

(1) Public access to the area of use is prohibited; and

(2) A buffer zone of not less than 400 feet is maintained.

(b) Surface irrigation of land used:

(1) As greenbelt if:

(I) Public access to the area of use is prohibited; and

(II) Human contact with the ~~[treated effluent]~~ ***reclaimed water*** does not occur.

(2) For agricultural purposes; and

(3) For the cultivation of fruit-bearing trees or nut-bearing trees.

(c) Subsurface irrigation of land used for agricultural purposes if public access is ~~[controlled.]~~ ***restricted.***

(d) Dust control.

(e) Soil compaction.

(f) Flushing sewer lines.

(g) An impoundment if:

(1) Public access to the impoundment is prohibited;

(2) All human activities involving contact with the ~~[treated effluent]~~ ***reclaimed water*** are prohibited; and

(3) Human contact with the ~~[treated effluent]~~ ***reclaimed water*** does not occur.

(h) Any activity approved for reuse category E.

(i) Any other use approved by the Division.

2. As used in this section, "dust control" means the program required pursuant to NAC 445B.22037 to prevent controllable particulate matter from becoming airborne.

Sec. 28. NAC 445A.2771 is hereby amended to read as follows:

445A.2771 ~~[Treated effluent]~~ ***Reclaimed water*** that meets the requirements for bacteriological quality set forth in NAC 445A.276 for reuse category E may be used for:

1. Spray irrigation of land used for agricultural purposes if:

(a) Public access to the area of use is prohibited; and

(b) A buffer zone of not less than 800 feet is maintained.

2. Any other use that is approved by the Division.

Sec. 29. NAC 445A.279 is hereby amended to read as follows:

445A.279 For the purpose of determining the quality of ~~[effluent,]~~ ***reclaimed water,*** storage reservoirs do not constitute part of the treatment process.

Sec. 30. NAC 445A.280 is hereby amended to read as follows:

445A.280 The Director may waive compliance with or modify any requirement of NAC 445A.274 to 445A.280, inclusive, ***and sections 2 to 15, inclusive, of this regulation*** for a specific proposed use of ~~[treated effluent]~~ ***reclaimed water*** upon his or her determination that because of the size, type or location of the proposed use, the waiver or modification is consistent with the policy set forth in NRS 445A.305.

Sec. 31. NAC 445A.819 is hereby amended to read as follows:

445A.819 "Degrade" means to cause or create an increase in the amount or concentration of any substance in an underground source of drinking water to an extent that:

1. A regulation prescribing ~~[standards for]~~ primary drinking water ***standards or secondary maximum contaminant levels*** is violated; or

2. The Director finds that the existing or potential municipal, industrial, domestic or agricultural use of that water is impaired.

Sec. 32. NAC 445A.849 is hereby amended to read as follows:

445A.849 A Class V well is any injection well not included in Classes I, II, III and IV, including, without limitation:

1. Wells used to inject the water for heating or cooling by a heat pump;

2. Cesspools or other devices receiving wastes which have an open bottom and sometimes have perforated sides;

3. Wells used to inject water previously used for cooling;

4. Wells used to drain surface fluid, primarily the runoff from storms, into a subsurface formation;

5. Wells used for the injection of fluids accumulated from dewatering operations;

6. Drywells and wells used for the injection of nonhazardous wastes into a subsurface formation;

7. Wells used to replenish the water in an aquifer;

8. Wells used to inject water into an aquifer of fresh water to prevent the intrusion of water of a lower quality into the fresh water;

9. Wells used to inject a mixture of water and sand, mill tailings or other solids into subsurface mines;

10. Wells used to inject domestic sewage for facilities other than single-family residences and having a volume capacity of more than ~~[3,000]~~ ***5,000*** gallons per day which are regulated as on-site sewage disposal systems pursuant to NAC 445A.950 to 445A.9706, inclusive;

11. Wells used to inject fluids into a zone, other than an oil or gas producing zone, to reduce or eliminate subsidence associated with the overdraft of fresh water;

12. Wells used for the storage of hydrocarbons in a gaseous state at standard temperature and pressure;

13. Geothermal injection wells used in contact and noncontact heating and aquaculture, and in the production of energy;

14. Wells used for solution mining of ores or minerals in conventional mines, such as stopes leaching;

15. Wells used to inject spent brine into the same formation from which it was withdrawn after extraction of halogens or their salts;

16. Injection wells used in experimental technologies;

17. Injection wells that are approved under a federal or state cleanup program and used to reinject pumped and treated contaminated groundwater, other than hazardous waste, back into the same formation;

18. Injection wells used to inject fluids for the chemical or microbiological treatment of contaminated groundwater or soil; and

19. Motor vehicle waste disposal wells.

Sec. 33. NAC 445A.867 is hereby amended to read as follows:

445A.867 ***1.*** Except as otherwise provided in NAC 445A.8491 to 445A.8499, inclusive, an applicant for a permit to inject fluids must satisfy the Director that the underground injection will not endanger any source of drinking water. ~~[An application for a permit must be filed within 180 days after July 22, 1987, for the operation of an injection well which is existing on that date and does not have a permit.]~~ Each application for a permit must be signed by the owner or, if the

owner does not operate the well, the operator of the well and must contain the following information:

~~[1.]~~ ***(a)*** The name of the facility.

~~[2.]~~ ***(b)*** The name and address of the owner.

~~[3.]~~ ***(c)*** The name and address of the operator, if different than the owner.

~~[4.]~~ ***(d)*** A description of the location of each injection well by the quarter-quarter section, section, township and range, and latitude and longitude.

~~[5.]~~ ***(e)*** A map of the location of the facility, preferably a topographic map prepared by the United States Geological Survey, extending at least 1 mile beyond the boundaries of the facility, locating each injection well for which a permit is sought and the area of review. The map must show, within the area of review, the number, location and type of all injection wells, producing wells, abandoned wells, surface bodies of water, surface and subsurface mines, quarries, public and private systems to supply water and other pertinent features on the surface.

~~[6.]~~ ***(f)*** A plan for corrective action, as required pursuant to NAC 445A.899, for each injection well within the area of review which penetrates the zone for injection, but is not correctly completed or plugged.

~~[7.]~~ ***(g)*** A narrative report, geologic cross section and isopach map in sufficient scale to detail the local geology and hydrology. The information should be sufficient to show the geologic formations, structural features and concentration of total dissolved solids for each formation, zone for injection and confining zone.

~~[8.]~~ ***(h)*** The plans and drawings for construction showing the details of the casing and cementing, including the size of the hole, type of casing and type and grade of cement.

~~[9.]~~ ***(i)*** The drilling log for each production or injection well owned or operated by the applicant which is located within the area of review.

~~[10.]~~ ***(j)*** The proposed operating data, including:

~~[(a)]~~ ***(1)*** The average and maximum daily rates of injection and the volume of the fluid injected;

~~[(b)]~~ ***(2)*** The average and maximum pressures of the injection; and

~~[(c)]~~ ***(3)*** The source of the fluid injected and an analysis of its physical, chemical and biological characteristics.

~~[11.]~~ ***(k)*** A chemical analysis, if available, of the fluid in the receiving formation to ensure compatibility with the injectate, and an analysis of the hydraulic conductivity of the receiving formation.

~~[12.]~~ ***(l)*** The proposed procedures for injection, including additives to or storage and pretreatment, if any, of the fluid injected, the use of the well, the planned standard practices for stimulation of the well and the planned schedule for workover.

~~[13.]~~ ***(m)*** A certificate that the applicant has ensured, through a performance bond or other appropriate means, the resources necessary to plug and abandon the well.

~~[14.]~~ ***(n)*** A plan for plugging and abandoning the well as described in NAC 445A.923.

~~[15.]~~ ***(o)*** Any other information required by the Director to ensure that the proposed operation will not degrade an underground source of drinking water. That information may include a plan for monitoring the elevation or quality of groundwater surrounding the zone for injection.

2. In addition to the requirements of subsection 1, an applicant for a permit for the injection of reclaimed water for indirect potable reuse must satisfy the requirements of NAC

445A.274 to 445A.280, inclusive, and sections 2 to 15, inclusive, of this regulation, as applicable.

3. As used in this section:

(a) "Indirect potable reuse" has the meaning ascribed to it in section 5 of this regulation.

(b) "Reclaimed water" has the meaning ascribed to it in section 7 of this regulation.

Sec. 34. NAC 445A.872 is hereby amended to read as follows:

445A.872 **1.** A nonrefundable fee must accompany each application for a permit for an injection well. The applicable fee is:

Type of Injection Well	Application Fee	Fee for Annual Services, Major Modifications or Renewal of Permit
Class II, oil and gas	$5,000 plus $625 for each well	$2,500 plus $200 for each well
Class V, geothermal injection wells associated with the production of energy		
Producing 25 megawatts or more	$6,250 plus $625 for each well	$3,750 plus $200 for each well

Type of Injection Well	Application Fee	Fee for Annual Services, Major Modifications or Renewal of Permit
Producing 10 megawatts or more but less than 25 megawatts	$5,000 plus $625 for each well	$1,875 plus $200 for each well
Producing less than 10 megawatts	$3,750 plus $625 for each well	$1,250 plus $200 for each well
Class V, geothermal injection associated with space heating		
Discharging less than 250,000 gallons daily	$875	$325
Discharging 250,000 gallons or more daily	$1,875	$625
Class V, injection wells associated with remediation, treatment of waste or experimental technology	$3,000	$1,500

Type of Injection Well	Application Fee	Fee for Annual Services, Major Modifications or Renewal of Permit
Class V, injection wells associated with mining pit dewatering.....	$5,000 plus $625 for each well	$2,500 plus $200 for each well
Class V, injection wells associated with aquifer storage and recovery ~~[,]~~ ***or*** aquifer recharge ~~[or treated effluent projects]~~ ***and not associated with reclaimed water projects***	***.....***$2,000 plus $60 for each well	$600 plus $40 for each well
Class V, injection wells associated with reclaimed water projects injecting less than 10,000,000 gallons daily	***$10,000 plus $625 for each well after 10 wells***	***$10,000 plus $200 for each well after 10 wells***

Type of Injection Well	Application Fee	Fee for Annual Services, Major Modifications or Renewal of Permit
Class V, injection wells associated with reclaimed water projects injecting 10,000,000 gallons or more but less than 20,000,000 gallons daily	***$10,000 plus $625 for each well after 20 wells***	***$20,000 plus $200 for each well after 20 wells***
Class V, injection wells associated with reclaimed water projects injecting 20,000,000 gallons or more but less than 40,000,000 gallons daily	***$10,000 plus $625 for each well after 30 wells***	***$30,000 plus $200 for each well after 30 wells***

Type of Injection Well	Application Fee	Fee for Annual Services, Major Modifications or Renewal of Permit
Class V, injection wells associated with reclaimed water projects injecting 40,000,000 gallons or more daily.....	***$10,000 plus $625 for each well after 40 wells***	***$40,000 plus $200 for each well after 40 wells***
Class V, all others	$625 plus $125 for each well	$200 plus $50 for each well
General Permit, remediation lasting more than 6 months.....	$1,500	$900
General Permit, remediation lasting 6 months or less	$300	
General Permit, septic system with a capacity of 5,000 or more gallons.....	$400	$300
General Permit, all others with a report requirement.....	$400	$300

Type of Injection Well	Application Fee	Fee for Annual Services, Major Modifications or Renewal of Permit
General Permit, all others without a report requirement	$200	$150
General Permit, filing fee for review of the plan	$200	

2. A Class III well will be charged a fee for a permit for the actual cost of the review of the application calculated at a rate of $50 per hour for the time spent for the review. The fee for renewal of a permit for a Class III well is $750.

3. A fee for the renewal of a permit or for major modifications, if applicable, must be paid in addition to the fee for annual services.

4. The fee for annual services must be:

(a) Submitted to the Division on or before July 1; and

(b) Paid in advance for each subsequent year during the life of the permit.

Sec. 35. NAC 445A.880 is hereby amended to read as follows:

445A.880 ***1.*** A permit expires 5 years after the date of issuance except that an earlier date may be specified by the Director.

2. If the holder of a permit submits a timely application for the renewal of a permit pursuant to NAC 445A.882 and the permit expires while the application is under review, the holder of the permit may continue to conduct the permitted activity in accordance with the terms and conditions of the expired permit until the Director takes final action on the application to reissue, revise or deny the renewal of the permit unless:

(a) The Director determines that the permittee is not in substantial compliance with the terms and conditions of the expired permit or with a schedule designed to bring the permittee into compliance with the terms and conditions of the expired permit;

(b) The Director, as a result of an action or the failure to act of the permittee, has been unable to take final action on the application on or before the expiration date of the permit; or

(c) The permittee has submitted an application with major deficiencies or has failed to properly supplement the application in a timely manner after being informed of the deficiencies.

Sec. 36. NAC 445A.882 is hereby amended to read as follows:

445A.882 ***1.*** Upon application and payment of a renewal fee to the Director at least 180 days before the date of expiration of the permit, the renewal of a permit must be reviewed by the Director.

2. The Director shall reissue, revise or deny the renewal of ***the*** permit and give written notice of his or her action to the holder of the permit***.*** ~~[before the date of expiration of the permit.]~~

Sec. 37. NAC 445A.912 is hereby amended to read as follows:

445A.912 The chemical, physical and biological nature of the injected fluid must be analyzed with sufficient frequency to yield representative data on its characteristics. When

requested by the Director, or at any time the injected fluid is modified to the extent that the analysis required by ***subparagraph (3) of*** paragraph ~~[(c)]~~ ***(j)***of subsection ~~[10]~~ ***1*** of NAC 445A.867 is incorrect or incomplete, a new analysis must be made and the results sent to the Director.

Sec. 38. NAC 445A.2748 is hereby repealed.

TEXT OF REPEALED SECTION

445A.2748 "Treated effluent" defined. "Treated effluent" means sewage that has been treated by a physical, biological or chemical process. The term does not include graywater.