

**TITLE 20 ENVIRONMENTAL PROTECTION**  
**CHAPTER 6 WATER QUALITY**  
**PART 8 GROUND AND SURFACE WATER PROTECTION –**  
**SUPPLEMENTAL REQUIREMENTS FOR WATER REUSE**

**20.6.8.1 ISSUING AGENCY:** Water Quality Control Commission.  
[20.6.8.1 NMAC - N, mm-dd-yy]

**20.6.8.2 SCOPE:** All persons subject to regulation implemented through the department pursuant to the Water Quality Act, Sections 74-6-1 et seq, NMSA 1978 and specifically to persons intending to reuse wastewater and their operations.  
[20.6.7.2 NMAC - N, mm-dd-yy]

**20.6.8.3 STATUTORY AUTHORITY:** Standards and regulations are adopted by the commission under the authority of the Water Quality Act, Sections 74-6-1 through 74-6-17 NMSA 1978 and the Produced Water Act, Subsection B of Section 70-13-3 NMSA 1978 and Subsection D of Section 70-13-4 NMSA 1978.  
[20.6.8.3 NMAC - N, mm/dd/yy]

**20.6.8.4 DURATION:** Permanent.  
[20.6.8.4 NMAC - N, mm-dd-yy]

**20.6.8.5 EFFECTIVE DATE:** Month Day, Year, unless a later date is cited at the end of a section.  
[20.6.8.5 NMAC - N, mm-dd-yy]

**20.6.8.6 OBJECTIVE:** The objective of 20.6.8 NMAC is to supplement the general requirements of 20.6.2.1200 through 20.6.2.2201 NMAC and 20.6.4.8 through 20.6.4.900 NMAC, and the general groundwater permitting requirements of 20.6.2.3000 through 20.6.2.3114 NMAC to control the discharges of water contaminants specific to water reuse.  
[20.6.8.6 NMAC - N, mm-dd-yy]

**20.6.8.7 DEFINITIONS:** The following terms as used in this part shall have the following meanings: terms defined in the Water Quality Act, but not defined in this part, will have the meaning given in the act.

**A. Terms beginning with numerals or the letter “A,” and abbreviations for units.**

(1) **“Agricultural application”** means the application of reuse water for cultivating the soil and growing crops or irrigating pasture for livestock grazing. Agricultural application includes the use of water in connection with the operation or maintenance of feedlots or animal feeding operations (“AFOs”), but not those activities defined as livestock application.

(2) **“Application”** means a final disposition of a treated wastewater for reuse. Applications include, but are not limited to industrial, agricultural, direct potable, indirect potable, recreational turf, rangeland, or ecological restoration water reuse. Applications may have effluent criteria to protect ground water, surface water, and aquatic health.

**B. Terms beginning with the letter “B”.**

(1) **“Bench-scale project”** means a project or study conducted in a laboratory.

**C. Terms beginning with the letter “C”.**

(1) **“Commercial application”** means the application of reuse water in connection with any activity that provides, or offers to provide, goods or services for incidental use, such as but not limited to car washes, laundry facilities, window washing, chemical mixing, where public access is not restricted or limited.

**D. Terms beginning with the letter “D”.**

(1) **“Demonstration project”** means a bench-scale or pilot project, as defined in this Part.

(2) **“Department”** means the New Mexico environment department.

(3) **“Direct potable application”** means the application of reclaimed wastewater for drinking water purposes through delivery directly to a drinking water plant or a drinking water distribution system without an environmental buffer. Additional treatment, monitoring, or an engineered buffer would be used in place of an environmental buffer to provide equivalent protection of public health and response time if the purified water does not meet specifications.

(4) **“Discharge permit”** as defined in 20.6.2 NMAC.

(5) **“Discharge plan”** as defined in 20.6.2 NMAC.

(6) **“Discharge site”** as defined in 20.6.2 NMAC.

(7) **“Disposal”** as defined in 20.6.2 NMAC.

(8) **“Domestic wastewater”** means untreated wastewater containing human excreta and

water-carried waste from typical residential plumbing fixtures and activities, including but not limited to, wastes from toilets, sinks, bath fixtures, clothes or dishwashing machines and floor drains.

**E. Terms beginning with the letter “E”.**

(1) **“Environmental buffer”** means any ground water, streams, lakes, or impoundments used for reuse water storage or conveyance purposes related to an indirect potable application.

**F. Terms beginning with the letter “F”.**

(1) **“Feasibility study”** means a study conducted by a person to determine if a new or modified domestic wastewater treatment technology will be technically, economically, or financially viable for use in a direct or indirect potable application.

(2) **“Flood irrigation application”** means land application of reuse water by ditches, furrows, pipelines, low flow emitters, and other non-sprinkler methods.

(3) **“Flowback water”** means the fluid returned after the hydraulic fracturing process is completed, where the internal pressure of the rock formation causes fluid to return to the surface through the wellbore. Flowback water is a component of produced water.

(4) **“Food crop application”** means application of reuse water to domestic plants which are produced for the purpose of or may be used in whole or in part for, consumption by people or livestock, including, but not limited to nursery, root, seedstock to be used for the production of food crops.

(5) **“Formation water”** means water that occurs naturally within the pores of rock.

**G. Terms beginning with the letter “G”.**

(1) **“Ground water”** as defined in 20.6.2 NMAC.

**H. Terms beginning with the letter “H”.**

(1) **“Hydraulic fracturing”** means a technique that fractures a rock formation that stimulates the flow of natural gas or oil, increasing the volumes that can be recovered. Fractures are created by pumping large quantities of fluids at high pressure down a wellbore and into the target rock formation. Hydraulic fracturing fluid, also referred to as fracking fluid, commonly consists of water, proppant, and chemical additives that open and enlarge fractures that can extend several hundred feet away from the wellbore. This technique is generally used in unconventional oil and gas production.

**I. Terms beginning with the letter “I”.**

(1) **“Indirect potable application”** means the application of reclaimed wastewater for drinking water purposes with an intermediary environmental or constructed buffer.

(2) **“Industrial application”** means the application of reuse water in any activity that is used in connection with industrial processes, such as alternative energy, hydrogen production, cooling water, process/boiler feeds, utility power plants, chemical plants, and metal working facilities where at a minimum, public access is restricted or limited.

(3) **“Industrial project”** means a reuse water project that does not discharge and that is used in connection with industrial processes, such as alternative energy, hydrogen production, cooling water, process/boiler feeds, utility power plants, chemical plants, and metal working facilities where at a minimum, public access is restricted or limited.

(4) **“Injection”** as defined in 20.6.2 NMAC

(5) **“Irrigation application”** means application of reuse water to land areas to foster plant growth.

**J. Terms beginning with the letter “J”. [RESERVED]**

**K. Terms beginning with the letter “K”. [RESERVED]**

**L. Terms beginning with the letter “L”.**

(1) **“Land application”** means the application of reuse water to the ground surface in which no other application has been assessed and to which the application or run-off does directly or indirectly enter a surface or ground water of the state.

(2) **“Livestock application”** means the application of reuse water for the consumption of water for the care and feeding of domestic animals such as cattle or horses. Livestock application does not include the use of water in connection with the operation or maintenance of feedlots or agricultural application of water.

**M. Terms beginning with the letter “M”. [RESERVED]**

**N. Terms beginning with the letter “N”.**

(1) **“National Pollutant Discharge Elimination System”** means the federal program for issuing, modifying, revoking, and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the federal Clean Water Act. The NPDES program is administered by the United States Environmental Protection Agency (EPA) in the State of New Mexico.

(2) **“NTU”** means nephelometric turbidity units, measured by a nephelometer.

(3) **“NPDES permit”** means a national pollutant discharge elimination permit which is an authorization, license, or equivalent control document issued by the authorized permitting entity to implement the requirements of the federal program as identified in 40 C.F.R. Sections 122, 123, and 124.

**O. Terms beginning with the letter “O”. [RESERVED]**

**P. Terms beginning with the letter “P”.**

(1) **“Person”** as defined in 20.6.2 NMAC.

(2) **“Pilot project”** means a representative engineering scale model or prototype system that is beyond the bench-scale and tested in a non-laboratory environment. A pilot project represents an increase in the technological scale than otherwise achievable in a laboratory and often involves larger quantities of materials over longer periods of time.

(3) **“Potable”** means water that is suitable for human consumption.

(4) **“Pretreatment”** means the reduction, elimination, or alteration of pollutants in wastewater prior to or in lieu of discharging into a publicly owned treatment works (POTW) or other wastewater treatment facility. The reduction or alteration may be obtained by physical, chemical, or biological processes, process changes, or by other means. Appropriate pretreatment technology includes control equipment, such as equalization tanks or facilities, for protection against volumetric or pollutant surges or load variations that might interfere with or otherwise be incompatible with the treatment facility.

(5) **“Produced water”** means a fluid (wastewater) that is an incidental byproduct from drilling for or the production of oil and gas, and includes formation water, flowback water, and any chemicals added downhole during drilling, production, or maintenance processes during the life cycle of an oil or gas well. Produced water includes known and unknown water pollutants.

**Q. Terms beginning with the letter “Q”. [RESERVED]**

**R. Terms beginning with the letter “R”.**

(1) **“Reclaimed wastewater”** means domestic wastewater that has been treated to the specified levels for the defined applications and complies with other applicable local, state, or federal regulations.

(2) **“Recycled produced water”** means produced water that is reconditioned by a recycling facility permitted or registered with the oil conservation division of the energy, minerals, and natural resources department, and is reused within the oil and gas industry for the exploration, drilling, production, treatment or refinement of oil and gas.

(3) **“Restoration application”** or **“ecological application”** means the use of water for the implementation of ecological or environmental restoration activities permitted under applicable state and federal regulations.

(4) **“Reuse water”** means a treated wastewater originating from domestic, industrial, or produced water sources, that has undergone a level of treatment appropriate for an application such as agriculture, irrigation, potable water supplies, aquifer recharge, industrial processes, or environmental restoration. Reuse water has a water quality, based on application, determined to be protective of the environment and human health. For purposes of this Part, reuse is categorized by the source of the water (e.g., “domestic reuse” is wastewater originated from domestic sources following appropriate treatment that may be used for various applications such as irrigation).

**S. Terms beginning with the letter “S”.**

(1) **“State”** means the state of New Mexico.

(2) **“Surface water”** means a “surface water(s) of the state” as defined in 20.6.4 NMAC.

**T. Terms beginning with the letter “T”.**

(1) **“Transference”** means the distribution, temporary storage, or disposal of reuse water.

(2) **“Treated produced water”** means produced water that is reconditioned by mechanical or chemical processes into a reusable form.

(3) **“Treated wastewater”** means wastewater that has undergone treatment.

(4) **“Treatment”** means a process in which wastewater has been reconditioned by biological, mechanical, or chemical processes to remove or eliminate contaminants, creating an effluent that can be returned to the water cycle either through discharge, transference, or reuse.

**U. Terms beginning with the letter “U”.**

- (1) **“Untreated produced water”** means produced water that has not undergone treatment.
- (2) **“Untreated wastewater”** means wastewater that has not undergone treatment.

**V. Terms beginning with the letter “V”. [RESERVED]**

**W. Terms beginning with the letter “W”.**

(1) **“Water contaminant”** means any substance that, if discharged or spilled, could alter the physical, chemical, biological or radiological qualities of water. “Water contaminant” does not mean source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, but may include all other radioactive materials, including but not limited to radium and accelerator-produced isotopes.

(2) **“Water pollutant”** means a water contaminant in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or to unreasonably interfere with the public welfare or the use of property.

(3) **“Water pollution”** as defined in 20.6.2 NMAC.

(4) **“Wastewater”** means water or other fluids associated directly with sewerage systems, industrial processes, or produced water that is disposed of, or undergoes treatment for discharge, transference, or reuse. Wastewater in this Part does not include dairy wastewater, as defined in 20.6.6 NMAC.

**X. Terms beginning with the letters “X” through “Z”. [RESERVED]**  
[20.6.8.7 NMAC – N, mm-dd-yy]

**20.6.8.8 – 20.6.8.99 [RESERVED]**

[20.6.8.8-20.6.8.99 NMAC – N, mm-dd-yy]

**20.6.8.100 GENERAL PROVISIONS:** Unless otherwise required by this Part, all persons are subject to the state’s Ground and Surface Water Protection Regulations (20.6.2 NMAC). This includes, but is not limited to, regulations relating to spills, notices of intent, permitting, fees, penalties, compliance orders, and abatement.  
[20.6.8.100 NMAC – N, mm-dd-yy]

**20.6.8.101 – 20.6.8.199 [RESERVED]**

[20.6.8.101-20.6.8.199 NMAC – N, mm-dd-yy]

**20.6.8.200 DOMESTIC WASTEWATER REUSE: [RESERVED]**

[20.6.8.200 NMAC – N, mm-dd-yy]

**20.6.8.201 DIRECT AND INDIRECT POTABLE APPLICATIONS:**

**A. Unauthorized applications.** The department shall not approve a discharge permit or a discharge permit modification that includes the discharge of reuse water for direct or indirect potable applications except for those authorized applications identified in Subsection B of 20.6.8.201 NMAC.

**B. Authorized applications.**

(1) **Feasibility studies:** Persons proposing to conduct a feasibility study for direct or indirect potable applications shall;

(a) Comply with all applicable permitting requirements in 20.6.2 and 20.6.4 NMAC.

(b) Ensure there is no connection between a potable water system and the water being studied and no cross connections exist between feasibility study-water and a community’s potable water supply.

(c) Ensure that all direct and indirect potable reuse feasibility studies are conducted in a manner that does not interfere with ongoing operations at the wastewater and drinking water facilities.

(d) Obtain approval from the department, through either a discharge permit or NPDES permit and comply with all conditions therein.

[20.6.8.201 – N, mm-dd-yy]

**20.6.8.202-299 [RESERVED]**

[20.6.8.202-20.6.8.299 NMAC – N, mm-dd-yy]

**20.6.8.300 INDUSTRIAL WASTEWATER REUSE: [RESERVED]**

[20.6.8.300 NMAC – N, mm-dd-yy]

**20.6.8.301-399 [RESERVED]**

[20.6.8.301-20.6.8.399 NMAC – N, mm-dd-yy]

**20.6.8.400 PRODUCED WATER REUSE:** As provided in the Produced Water Act, Subsection B of Section 70-13-3 NMSA 1978, the following provisions apply to the discharge of produced water for activities unrelated to the exploration, drilling, production, treatment, or refinement of oil or gas.

**A. General requirements.**

(1) **Untreated produced water discharge to surface water:** No person shall cause or allow untreated produced water to discharge so that it may move directly or indirectly to a surface water. The department shall deny certification of any federal permit proposing to discharge untreated produced water to a surface water.

(2) **Treated produced water discharge to surface water:** No person shall cause or allow treated produced water to discharge so that it may move directly or indirectly to a surface water. The department shall deny certification of any federal permit proposing to discharge treated produced water to a surface water.

(3) **Untreated produced water discharge to ground water:** No person shall cause or allow untreated produced water to discharge so that it may move directly or indirectly into ground water. The department shall not issue a discharge permit or a discharge permit modification that includes the discharge of untreated produced water.

(4) **Treated produced water discharge to ground water:** No person shall cause or allow treated produced water to discharge so that it may move directly or indirectly into ground water. The department shall not issue a discharge permit or a discharge permit modification that includes the discharge of treated produced water without development and adoption of standards specific to treated produced water (Subsection D of 20.6.8.400 NMAC). Demonstration projects or industrial projects submitted to the department through the notice of intent process in Subsection C of 20.6.8.400 NMAC are authorized to operate, following the determination of no discharge permit required issued by the department.

**B. Authorized uses.** Demonstration projects or industrial projects, determined by the department not to require a discharge permit because the demonstration project or industrial project will not discharge in a manner that may directly or indirectly affect ground or surface water, are subject to the following requirements:

(1) Persons intending to conduct a demonstration project or industrial project shall secure and comply with all applicable federal, state, and local statutes, permits, and certifications, including the Produced Water Act, Sections 70-13-1, et. seq NMSA 1978, and including payment of department fees and satisfying department financial assurance requirements.

(2) The demonstration project or industrial project shall be designed to provide information specific to untreated produced water quality, treatment technologies, treated produced water quality, treatment volumes, and toxicity studies for potential produced water reuse applications.

(3) In accordance with 20.6.2.1201 NMAC, any person intending to use produced water for approved purposes, unrelated to the production of oil and gas, shall submit to the ground water quality bureau of the department a produced water notice of intent prior to use.

(4) Demonstration projects or industrial projects shall not commence until the department has made a determination of no permit required on the notice of intent.

(5) Persons transporting, storing, treating, or utilizing untreated or treated produced water shall have written procedures at the locations where the demonstration project or industrial project is physically located to prevent releases onto the ground, directly or indirectly into ground or surface water.

(6) All untreated and treated produced water shall be handled, transported, and stored in accordance with all other applicable local, state, and federal regulations.

(7) Any release of untreated or treated produced water is subject to the notifications and corrective actions in 20.6.2.1203 NMAC except releases under the authority of the oil conservation commission pursuant to the provisions of the Oil and Gas Act, NMSA 1978, Section 70-2-12 and other laws conferring power on the oil conservation commission and the oil conservation division of the energy, minerals, and natural resources department to prevent or abate water pollution.

(8) Persons disposing of untreated or treated produced water, as part of the final disposition following a demonstration project or industrial project, shall use one of the following methods in accordance with the relative permit: discharge to a produced water disposal well permitted pursuant to the oil conservation commission's regulations for oil and gas injection at 19.15.26 NMAC, delivery to a surface waste management facility permitted pursuant to the oil conservation commission's regulations for oil and gas surface waste management facilities (19.15.36 NMAC), or disposal in a permanent pit permitted pursuant to the oil conservation commission's regulations for oil and gas pits, closed-loop systems, below-grade tanks and sumps at 19.15.17 NMAC. The department may consider alternative disposal options on a case-by-case basis.

(i) Persons disposing of the components of a demonstration project or industrial project using untreated or treated produced water, as part of the final disposition must adhere to all local, state, and federal regulations, as applicable.

**C. Notice of intent.**

(1) Any person intending to use produced water for an authorized use under Subsection B of 20.6.8.400 NMAC shall submit to the ground water quality bureau of the department a produced water notice of intent prior to use.

(a) Notices shall be on a form provided by the department and shall include the following information:

- (i) the name and address of the person intending to conduct the demonstration project or industrial project;
- (ii) the location of the intended demonstration project or industrial project;
- (iii) the concentration of water contaminants in the untreated produced water used in the demonstration project or industrial project;
- (iv) the quantity of produced water used in the demonstration project or industrial project;
- (v) the demonstration project or industrial project research plan and objectives;
- (vi) documentation that the demonstration project or industrial project design is consistent with the approved uses in Subsection B of 20.6.8.400 NMAC;
- (vii) the storage, secondary containment and spill prevention methods that will be used to prevent accidental discharges;
- (viii) a plan to transport in and transport out any untreated produced water or treated produced water in a safe manner, in accordance with state and federal regulations;
- (ix) plans for safe handling and proper disposal of produced water and any materials that come into contact with untreated produced water or treated produced water, including soils, plant material, treatment equipment, and containment area materials;
- (x) the health and safety considerations that minimize the risk of human exposure to produced water via any exposure pathway; and
- (xi) financial assurance in place to cover the cost of cleanup and remediation in the event of failure during operation and closure of the demonstration project or industrial project.

(b) The department, at its discretion, may request additional information.

(c) Based on the information provided in the notice of intent, the department shall make a determination if the demonstration project or industrial project meets the requirements in this section. If the demonstration project or industrial project does not meet the requirements in this section, the person shall not implement the demonstration project or industrial project as proposed.

(2) Persons implementing demonstration projects or industrial projects pursuant to Subsection B of 20.6.8.400 NMAC shall submit to the department all research results, including lab analyses of all water contaminants in the untreated produced water and treated produced water, to assist the department in developing standards and assist the commission in promulgation of regulations for the use of treated produced water in a manner that prevents water pollution and protects human health and the environment.

[20.6.8.400 NMAC – N, mm-dd-yy]

**20.6.8.401-20.6.8.899 [RESERVED]**  
[20.6.8.401-20.6.8.899 NMAC – N, mm-dd-yy]

**20.6.8.900 REFERENCES: [RESERVED]**  
[20.6.8.900 NMAC – N, mm-dd-yy]