AGREEMENT

FOR

ENGINEERING SERVICES

This AGREEMENT, between the Norman Utilities Authority (OWNER) and Garver, LLC, (ENGINEER);

WITNESSETH

WHEREAS, the OWNER intends to conduct a assessment of Norman Water Reclamation Facilities (WRF) non-potable water system and develop recommendations to rehabilitate the system and recommend alternative uses for the non-potable water system as further described in Attachment B; and

WHEREAS, OWNER requires engineering services in connection with the PROJECT (the SERVICES) (the SERVICES); and

WHEREAS, ENGINEER is prepared to provide said SERVICES.

NOW THEREFORE, in consideration of the promises contained in this AGREEMENT, OWNER and ENGINEER agree as follows:

ARTICLE 1 - EFFECTIVE DATE

The effective date of this AGREEMENT shall be _____.

ARTICLE 2 - COMPLETION DATE

ENGINEER shall complete the SERVICES in accordance with Attachment A, Project Schedule.

ARTICLE 3 - GOVERNING LAW

The laws of the state of Oklahoma shall govern this AGREEMENT.

ARTICLE 4 - SERVICES TO BE PERFORMED BY ENGINEER

ENGINEER shall perform the SERVICES described in Attachment B, Scope of Services.

ARTICLE 5 - COMPENSATION

OWNER shall pay ENGINEER in accordance with Attachment C, Compensation.

ARTICLE 6 - OWNER'S RESPONSIBILITIES

6.1. OWNER-Furnished Data: Upon request, OWNER will provide to ENGINEER all data in OWNER's possession relating to ENGINEER's SERVICES on the PROJECT. Such data may include electronic data available from the OWNER's Geographic Information System (GIS), data generated by OWNER's wastewater collection system model and existing water quality data. ENGINEER will reasonably rely upon the accuracy, timeliness, and completeness of the information provided by OWNER. OWNER's data is provided for temporary use or copying by ENGINEER.

6.2. Access to Facilities and Property: OWNER will make its facilities accessible to ENGINEER as required for ENGINEER's performance of its SERVICES.

6.3. Timely Review: OWNER will examine ENGINEER's studies, reports, sketches, drawings, specifications, proposals, and other documents; and transmit OWNER comments or other decisions to ENGINEER in a timely manner.

6.4. Meetings: OWNER will participate in monthly progress meetings or other meetings with ENGINEER or contractor(s) defined in Scope of Services.

6.5. Advertisements, Permits, and Access: Unless otherwise agreed to in the Scope of Services, OWNER will obtain, arrange, and pay for all advertisements for bids; permits and licenses required by local, state, or

federal authorities; and land, easements, rights-of-way, and access necessary for ENGINEER's SERVICES or PROJECT construction.

6.6. Hazardous Substances: If hazardous substances in any form are encountered or suspected, ENGINEER will stop its own work in the affected portions of the PROJECT to permit testing and evaluation. ENGINEER will, if requested by OWNER, conduct tests to determine the extent of the problem and will perform the necessary studies and recommend necessary remedial measures at an additional fee with contract terms to be negotiated. ENGINEER shall not assume any role in the identification, evaluation, treatment, storage, disposal, or transportation of any hazardous substance or waste.

ARTICLE 7 - STANDARD OF CARE

ENGINEER shall exercise the same degree of care skill and diligence in the performance of the SERVICES as is ordinarily possessed and exercised by a professional engineer under similar circumstances. ENGINEER shall correct the SERVICES that fail to satisfy this standard of care. No warranty, express or implied is included in this AGREEMENT or in any drawing, specifications, report or opinion produced pursuant to this AGREEMENT.

ARTICLE 8 - LIABILITY AND INDEMNIFICATION

8.1 General. Having considered the potential liabilities that may exist during the performance of the SERVICES, the benefits of the PROJECT, the ENGINEER's fee for the SERVICES and in consideration of the promises contained in this AGREEMENT, OWNER and ENGINEER agree to allocate and limit such liabilities in accordance with this Article.

8.2 Indemnification and Liability. The ENGINEER agrees to defend, indemnify, and hold harmless the OWNER, its officers, servants, and employees, from and against legal liability for all claims, losses, damage, cost, and expense (including reasonable attorneys' fees and accountants' fees) caused by a negligent act, error, or omission of the ENGINEER in the performance of services under this Agreement. OWNER agrees to defend, indemnify, and hold harmless the ENGINEER, its officers, servants, and employees, from and against legal liability for all claims, losses, damage, cost, and expense (including reasonable attorneys' fees and accountants' fees) caused by a negligent act, error, or omission of the OWNER in the performance of services under this Agreement, provided such indemnification shall be applicable only to the extent sovereign immunity has been waived pursuant to Oklahoma law. The ENGINEER and the OWNER each agree to promptly service notice on the other party of any claims arising hereunder, and shall cooperate in the defense of such claims. The acceptance by OWNER or its representatives of any certification of insurance providing for coverage other than as required in this Agreement to be furnished by the ENGINEER shall in no event be deemed a waiver of any of the provisions of this indemnity provision. None of the foregoing provisions shall deprive the OWNER of any action, right, or remedy otherwise available to OWNER at common law.

8.3 Employee Claims. ENGINEER shall indemnify OWNER against legal liability for damages arising out of claims by ENGINEER's employees. OWNER shall indemnify ENGINEER against legal liability for damages arising out of claims by OWNER's employees.

8.4 Consequential Damages. To the fullest extent permitted by law, ENGINEER shall not be liable to OWNER for any special, indirect or consequential damages resulting in any way from the performance of the SERVICES.

8.5 Survival. Upon completion of all SERVICES obligations and duties provided for in this AGREEMENT or if this AGREEMENT is terminated for any reason the terms and conditions of this Article shall survive.

ARTICLE 9 - INSURANCE

During the performance of the SERVICES under this AGREEMENT ENGINEER shall maintain the following insurance:

9.1 Worker's compensation insurance for ENGINEER's employees as required by Oklahoma Workers Compensation Statutes.

9.2 Comprehensive general liability insurance with a minimum of $1,000,000 per each occurrence and $2,000,000 aggregate.

9.3 Comprehensive automobile liability insurance with a minimum of $1,000,000 combined limit.

9.4 Professional Liability (errors and omissions) insurance providing a minimum policy value of $2,000,000 aggregate.

ENGINEER shall furnish OWNER certificates of insurance that shall include a provision that such insurance shall not be canceled without at least thirty days written notice to OWNER. All PROJECT contractors shall be required to include OWNER and ENGINEER as additional insured on their General Liability Insurance policies to the extent of the indemnities provided for in 8.2.

ENGINEER and OWNER each shall require its insurance carriers to waive all rights of subrogation against the other and its directors, officers, partners, commissioners, officials, agents and employees for damages covered by property insurance during and after the SERVICES. A similar provision shall be incorporated into all contractual arrangements entered into by OWNER and shall protect OWNER and ENGINEER to the same extent.

ARTICLE 10 - LIMITATIONS OF RESPONSIBILITY

ENGINEER shall not be responsible for: (1) construction means, methods, techniques, sequences, procedures or safety and security precautions and programs in connection with the PROJECT; (2) the failure of any contractor, subcontractor, vendor or other PROJECT participant, not under contract to ENGINEER, to fulfill contractual responsibilities to the OWNER or to comply with federal, state or local laws, regulations, and codes; or (3) procuring permits, certificates and licenses required for any construction unless such responsibilities are specifically assigned to ENGINEER in Attachment B, Scope of Services.

ARTICLE 11 - OPINIONS OF COST AND SCHEDULE

Since ENGINEER has no control over the cost of labor, materials or equipment furnished by others or over the resources provided by others to meet PROJECT schedules, ENGINEER's opinion of probable costs and of PROJECT schedules shall be made on the basis of experience and qualifications as a professional engineer. ENGINEER does not guarantee that proposals, bids, or actual PROJECT costs will not vary from ENGINEER's cost estimates.

ARTICLE 12 - REUSE OF DOCUMENTS

Upon OWNER's request ENGINEER shall furnish OWNER with deliverables and/or other data on electronic media. All documents, including but not limited to, drawings, specifications and computer software prepared by ENGINEER pursuant to this AGREEMENT are instruments of Service in respect to the PROJECT. Said documents are not intended or represented to be suitable for reuse by OWNER or others on extensions of the PROJECT or on any other PROJECT.

ARTICLE 13 - TERMINATION

This AGREEMENT may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with the material terms of this AGREEMENT. The non-performing party shall have fifteen (15) calendar days from the date of the termination notice to cure or to submit a plan for cure acceptable to the other party.

OWNER may terminate or suspend performance of this AGREEMENT for OWNER's convenience upon written notice to ENGINEER. ENGINEER shall terminate or suspend performance of the SERVICES on a schedule acceptable to OWNER. If termination or suspension is for OWNER's convenience, OWNER shall pay ENGINEER for all the SERVICES performed to date, amount not to exceed the normal fee amount due for the SERVICES rendered

and termination or suspension expenses. Upon restart, an equitable adjustment shall be made to ENGINEER's compensation.

ARTICLE 14 - DELAY IN PERFORMANCE

Neither OWNER nor ENGINEER shall be considered in default of this AGREEMENT for delays in performance caused by circumstances beyond the reasonable control of the non-performing party. For purposes of this AGREEMENT, such circumstances include, but are not limited to abnormal weather conditions; floods; earthquakes; fire; epidemics; war; riot and other civil disturbances; strikes, work slowdowns and other labor disturbances; sabotage; judicial restraint; and inability to procure permits, licenses, or authorizations from any local, state, or federal agency for any of the supplies, materials, accesses, or SERVICES required to be provided by either OWNER or ENGINEER under this AGREEMENT.

Should such circumstances occur the non-performing party shall, within a reasonable period after being prevented from performing, give written notice to the other party describing the circumstances preventing continued performance and the efforts being made to resume performance of this AGREEMENT.

ARTICLE 15 - COMMUNICATIONS

Any communication required by this AGREEMENT shall be made in writing to the address specified below:

ENGINEER: Michael Nguyen, P.E.
Garver, LLC
750 SW 24th Street Suite 200
Oklahoma City, OK 73160
405-666-2827
MTNGUYEN@GarverUSA.com

OWNER: Peter Wolbach, Staff Engineer
City of Norman – Utilities Department
225 N Webster Avenue
P.O. Box 370
Norman OK 73069 / 73070
405-217-7778
peter.wolbach@normanok.gov

Nothing contained in this Article shall be construed to restrict the transmission of routine communications between representatives of ENGINEER and OWNER.

ARTICLE 16 - WAIVER

A waiver by either OWNER or ENGINEER of any breach of this AGREEMENT shall be in writing. Such a waiver shall not affect the waiving party's rights with respect to any other or further breach.

ARTICLE 17 - SEVERABILITY

The invalidity, illegality, or unenforceability of any provision of this AGREEMENT or the occurrence of any event rendering any portion or provision of this AGREEMENT void shall in no way affect the validity or enforceability of any other portion or provision of this AGREEMENT. Any void provision shall be deemed severed from this AGREEMENT, and the balance of this AGREEMENT shall be construed and enforced as if this AGREEMENT did not contain the particular portion or provision held to be void. The parties further agree to amend this AGREEMENT to replace any stricken provision with a valid Provision that comes as close as possible to the intent of the stricken provision. The

provisions of this Article shall not prevent this entire AGREEMENT from being void should a provision, which is of the essence of this AGREEMENT, be determined void.

ARTICLE 18 – NON-DISCRIMINATION

In connection with the performance of work under this contract, the ENGINEER agrees as follows:

A. The ENGINEER agrees not to discriminate against any employee or applicant for employment because of race, color, religion, ancestry, national origin, age, place of birth, disability, sex, sexual orientation, gender identity or expression, familial status, or marital status, including marriage to a person of the same sex. The ENGINEER shall take affirmative action to ensure that employees are treated without regard to their race, color, religion, ancestry, national origin, age, place of birth, disability, sex, sexual orientation, gender identity or expression, familial status, or marital status, including marriage to a person of the same sex. Such actions shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruiting or recruitment, advertising, lay-off, termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The ENGINEER and any companies subcontracted shall agree to post in a conspicuous place, available to employees and applicants for employment, notices to be provided by the City Clerk of the City of Norman setting forth the provisions in this section.

B. In the event of the ENGINEER's noncompliance with this nondiscrimination clause, the contract may be canceled or terminated by the City Council. The ENGINEER may be declared by the City Council ineligible for further contracts with the said agency until satisfactory proof of intent to comply shall be made by the ENGINEER.

C. The ENGINEER agrees to include this nondiscrimination clause in any subcontracts connected with the performance of this agreement.

ARTICLE 19 - INTEGRATION

This AGREEMENT represents the entire and integrated AGREEMENT between OWNER and ENGINEER. It supersedes all prior and contemporaneous communications, representations, and agreements, whether oral or written, relating to the subject matter of this AGREEMENT. This AGREEMENT, including its attachments and schedules, may only be changed by a written amendment executed by both parties. The following attachments and schedules are hereby made a part of this AGREEMENT:

Attachment A - Schedule
Attachment B - Scope of Services
Attachment C - Compensation

ARTICLE 20 - SUCCESSORS AND ASSIGNS

OWNER and ENGINEER each binds itself and its directors, officers, partners, successors, executors, administrators, assigns, and legal representatives to the other party to this AGREEMENT and to the directors, officers, partners, successors, executors, administrators, assigns, and legal representatives of such other party in respect to all provisions of this AGREEMENT.

[*Signatures follow*]

IN WITNESS WHEREOF, OWNER and ENGINEER have executed this AGREEMENT.

DATED this _____ day of _____ 20_____.

Garver, LLC – ENGINEER

By: Mary E Mach

Title: Vice President

ATTEST

Project Manager

Norman Utilities Authority – OWNER

APPROVED as to form and legality this 22 day of January, 20____.

City Attorney

APPROVED by the Trustees of the Norman Utilities Authority this _____ day of _____, 20____.

ATTEST

By: _____

Title: Chairman

Secretary

ATTACHMENT A

SCHEDULE

Engineer shall begin work under this Agreement within fourteen (14) days of a Notice to Proceed and shall complete the Work in accordance with the proposed (overall) Project schedule.

Phase Description	Calendar Days
Kickoff Workshop	15 days from NTP
Draft Non-Potable System Assessment Workshop	60 days from Kickoff
Draft Onsite Non-Potable Alternative Evaluation TM Workshop	60 days from acceptance of Final Non-Potable System Assessment Workshop
Final Onsite Non-Potable Alternative Evaluation TM	15 days from Owner's comments from Draft Non-Potable Alternative Evaluation TM Workshop

ATTACHMENT B

SCOPE OF SERVICES

General

The Water Reclamation Facility (WRF) Non-Potable System Rehabilitation will consist of two (2) phases and as described further in more detail below. Currently the non-potable system is not functioning as designed and possible cross connections to the potable water system by the non-potable pump station. The first phase is to assess the non-potable water pump and distribution system and develop one (1) recommendation to bring the system back online and provide recommendation for cross connection locations. The non-potable water system assessment includes a visual evaluation of the existing system conditions, including pump equipment, electrical panels and instrumentation, strainers, back flow preventors, and valves. The second phase is to evaluate the feasibility of expansion and usage of the non-potable water system inside the Norman WRF. The non-potable water system evaluation will account for up to three (3) internal locations. All scope of services, assessment and alternative evaluations, will be documented in Technical Memorandum (TM).

Task 1 – Project Administration

1.1 Engineer will attend one in-person, kickoff meeting and site visit with up to four (4) Engineer team members to discuss project objectives, internal and external team member roles and responsibilities, communication protocols, document management protocols, and schedule.

1.2 Engineer will develop a list of data request items identified during the site visit, including but not limited to: O&M Manual's for equipment such as pumps, electrical panels, instrumentation, strainers, valves, and back flow preventors.

1.3 Engineer will develop a Project Management Plan (PMP) and Quality Assurance/Quality Control (QA/QC) Plan to be executed at each milestone.

1.4 Engineer will prepare and provide up to five (5) monthly progress/status reports, sufficient to support monthly billings. Monthly status reports shall be submitted with monthly invoices and project updates.

Task 2 – Non-Potable Water System Assessment

2.1 Engineer will assess the non-potable water pumps and distribution system and develop one (1) recommendation to bring the system back online and provide recommendation for cross connection locations. The non-potable water system assessment will document an evaluation of the existing system conditions, including pump equipment and system curves, electrical panels and instrumentation, strainers, back flow preventors, and valves.

2.2 Engineer will document findings from the site visit assessment and evaluation of record drawings and data request items. The assessment will include the following:

- Marked up site plan drawings of existing non-potable water system based on record drawings and site visit drawings.
- Non-potable water pumps system curves and system capacity based on current non-potable water demands.
- One (1) recommendation to bring the non-potable water system online.
- A conceptual opinion of probable construction cost (OPCC) that will be Class 4 as defined by AACE for recommendation.

2.3 Engineer will conduct a Draft Non-Potable Water System Assessment Workshop with up to four (4) Engineering team members in person at the Owner's office to present the evaluation and alternatives and receive comments. Engineer will summarize the meeting in minutes and will be provided to the Owner.

Task 3 – Non-Potable Alternative Evaluation

3.1 Engineer will evaluate up to three (3) locations inside of the plant for possible non-potable water usage that is not currently being utilized. The following are a list of potential onsite locations:

- Headworks to supply existing mechanical bar screens wash water demands.
- West Side Lift Station to supply mechanical bar screens wash water demands.
- Dewatering building to supply centrifuge equipment wash water demands.

3.2 Engineer will draft and deliver an Onsite Non-Potable Alternatives Evaluation TM, documenting findings from the site visit assessment and alternative evaluations. The TM will include the following:

- Summary of flow and pressure demand, along with required system improvements for each of the evaluated alternatives outlined in 3.1.
- Net Present Value (NPV) analysis with recurring O&M costs over a 20-year horizon for all alternatives.
- A conceptual OPCC that will be Class 4 as defined by AACE for all developed alternatives.
- One (1) conceptual sketch for each evaluated alternative based on record drawings.

3.3 Engineer will conduct a workshop to present and discuss the results of the Draft Onsite Non-Potable Alternatives Evaluation TM with up to four (4) Engineer team members in person at the Owner's office. Engineer will summarize comments and action items in meeting minutes, which will be provided to the Owner.

3.4 Engineer will update the Draft Non-Onsite Non-Potable Alternatives Evaluation TM based on comments provided by Owner and agreed to by Engineer; Engineer will prepare a Final Onsite Non-Potable Alternatives Evaluation TM in electronic format (PDF).

PROJECT DELIVERABLES

The following will be submitted to the Owner, or others as indicated, by Engineer:

A. Electronic copies (.pdf) of the Draft and Final Onsite Non-Potable Alternatives Evaluation TM.
B. Electronic copies (.pdf) of the submittals of meeting minutes and workshop presentations.
C. Electronic files as requested.

ADDITIONAL SERVICES

With written approval from Owner, Engineer will evaluate up to two (2) locations outside of the plant for possible non-potable water usage that is not currently being utilized. The following are a list of proposed offsite locations:

- Compost Facility, which requires a Category 3 water quality per OAC Chapter 627
- Near-by golf course, which requires a Category 2 water quality per OAC Chapter 627 or other application requiring Category 2 water quality. OAC Chapter 627 is included as Exhibit 1.

Engineer will draft and deliver an Offsite Non-Potable Alternatives Evaluation TM, documenting findings from the site visit assessment and alternative evaluations. The TM will include the following:

- Summary of flow and pressure demand, along with required system improvements for each of the evaluated alternatives reuse locations outside of the plant.
- Net Present Value (NPV) analysis with recurring O&M costs over a 20-year horizon for all alternatives.
- A conceptual OPCC that will be Class 4 as defined by AACE for all developed alternatives.
- One (1) conceptual sketch for each evaluated alternative based on record drawings.

EXTRA WORK

The following items are not included under this agreement but will be considered as extra work:

A. Non-potable water system pressure and distribution model.
B. WRF treatment or nutrient removal processes.
C. Development of Facility Observation Forms
D. Development of new drawing model to create 2D and 3D drawings.
E. Submittals or deliverables in addition to those listed herein.
F. Design services, including professionally stamped preliminary and final design.
G. Surveying services.
H. Geotechnical services.
I. Bidding and Construction services.
J. Regulatory Sampling.
K. NPDES permitting or reporting.

ATTACHMENT C

COMPENSATION

The OWNER will compensate ENGINEER on a lump sum basis for the SERVICES rendered. The lump sum fee is broken down below by task as defined in the Scope of Services:

Activity	Basic Task Section	Lump Sum Amount
1	Project Administration	$11,720
2	Non-Potable Water System Assessment	$18,642
3	Non-Potable Alternative Evaluation (Inside Fence)	$24,984
	Subtotal for Basic Task	**$55,346**
Activity	**Additional Services Section**	
	Non-Potable Alternative Evaluation (Outside Fence)	$20,800

The lump sum amount to be paid under this Work Order is $55,346. Any unused portion of the fee, due to delays beyond Garver's control, will be increased six percent (6%) annually with the first increase effective on or about July 1, 2027.

Additional Services (Extra Work). For services not described or included in Section 2, but requested by the Owner in writing, the Owner will pay Garver as expressly set forth in the applicable Amendment, or in the event the Amendment is silent, for the additional time spent on the Project, at the agreed upon rates for each classification of Garver's personnel (may include contract staff classified at Garver's discretion) plus reimbursable expenses including but not limited to printing, courier service, reproduction, and travel. Rates will be increased annually with the first increase effective on or about July 1, 2027.

CHAPTER 627. OPERATION AND MAINTENANCE OF WATER REUSE SYSTEMS

[**Authority:**27A O.S., §§ 1-3-101, 2-2-101, 2-2-201, 2-3-402, 2-6-103, 2-6-203, 2-6-402, and 2-6-501 et seq.]
[**Source:**Codified 7-1-12]

SUBCHAPTER 1. GENERAL PROVISIONS

252:627-1-1. Purpose and authority

(a) **Purpose.** This Chapter establishes the operating requirements for water reuse systems that are permitted or qualify to be permitted under OAC 252:656.
(b) **Authority.** This Chapter is authorized by 27A O.S. §§ 2-6-101 through 2-6-105, 27A O.S. §§ 2-6-401 through 2-6-403, and 27A O.S. §§ 2-6-501.
(c) **Applicability.** The rules in this Chapter apply to any person or entity that owns, operates and/or has been permitted to construct a water reuse system in accordance with OAC 252:656.

[**Source:** Added at 29 Ok Reg 1044, eff 7-1-12]

252:627-1-2. Definitions

In addition to the definitions contained in the Environmental Quality Code (27A O.S. § 2-1-101 *et seq.*), the following words and terms, when used in this Chapter, shall have the following meaning, unless the context clearly indicates otherwise:

"Bypass" means the intentional or unintentional diversion of a waste stream from any portion of a wastewater treatment system or a water reuse system.

"Cell" means an individual basin of a lagoon system.

"DEQ" means the Oklahoma Department of Environmental Quality.

"Discharge" means any intentional or unintentional release by leaking, pumping, pouring, emitting, emptying, dumping, escaping, seeping, overflowing, leaching or other means of release of wastewater or reclaimed water into any waters of the state or into or on any location where they may enter waters of the state.

"End-of-pipe" means the terminal points in all reclaimed water users'distribution systems.

"Lagoon" means a soil or lined basin, either below or above ground level, that is designed, maintained and operated to store, recycle and/or treat wastewater.

"Operator" means the individual who is properly certified by DEQ and who is responsible for the maintenance and operation of a water reuse system.

"MOR" means Monthly Operation Report.

"Person" means any individual, company, corporation, government agency, municipality, or any other entity.

"Reclaimed water" means wastewater that has gone through various treatment processes to meet specific water quality criteria with the intent of being used in a beneficial manner.

"Supplier" means a person or entity that treats and provides reclaimed water pursuant to a permit issued by DEQ.

"Treatment works" means any plant, disposal field, lagoon, incinerator or other facility used to treat, stabilize, hold or reclaim wastewater.

"User" means a person or entity that uses reclaimed water. In those instances in which the supplier and the user are the same entity, the entity is a "supplier" subject to the provisions of this Chapter.

"Water reuse system" means a treatment and distribution system designed to treat and supply reclaimed water.

"Wetted perimeter" means the area where a land application device distributes reclaimed water.

[**Source:** Added at 29 Ok Reg 1044, eff 7-1-12]

252:627-1-3. Permit requirements

(a) **Requirement for Permit to Construct.** No one shall construct, modify or operate a water reuse system without first obtaining a Permit to Construct pursuant to OAC 252:656.
(b) **Requirement for Permit to Supply.** No one shall supply reclaimed water without first obtaining a Permit to Supply pursuant to this Section, except when using reclaimed water within the wastewater treatment plant boundaries pursuant to Category 6.
(c) **Applications for Permits to Supply.** Applications for Permits to Supply Reclaimed Water shall be submitted to DEQ at least six (6) months prior to the anticipated start date for supplying reclaimed water and shall include the following:

(1) a complete and signed application;
(2) the required permit application fee;
(3) a copy of the Permit(s) to Construct the water reuse treatment and distribution system; and
(4) a copy of the binding user agreement between the supplier and each user of the reclaimed water.

(A) Agreements between suppliers and users of Categories 2 through 4 reclaimed water shall contain the following minimum provisions:

(i) A statement that the user shall operate all reclaimed water distribution systems in compliance with all applicable DEQ regulations.
(ii) A statement that the user shall allow the supplier reasonable access to all site(s) to determine whether the user is operating its facilities in compliance with the applicable DEQ regulations, and/or performing all required monitoring and analysis.
(iii) Documentation evidencing the user's legal interest in all locations where reclaimed water is being used.

(B) Category 5 user agreements are subject to the provisions of OAC 252:656-25-2(d).

(d) **Duration.** Permits to Supply are operating permits that expire five (5) years from the date of issuance.
(e) **Renewals for Permits to Supply.** Suppliers shall submit applications to renew existing Permits to Supply at least six (6) months prior to the permit's expiration date.
(f) **Responsibility.** Suppliers shall be responsible for assuring that users operate all reclaimed water distribution sites in compliance with DEQ regulations.

[**Source:** Added at 29 Ok Reg 1044, eff 7-1-12; Amended at 32 Ok Reg 983, eff 9-15-15]

252:627-1-4. Compliance required

Suppliers shall ensure that water reuse systems are operated pursuant to the terms of permits issued by DEQ and this Chapter. When in conflict, the terms of the permit shall supersede the requirements of this Chapter. Suppliers shall immediately stop supplying reclaimed water whenever the reclaimed water does not meet the requirements in Appendix A for chlorine residual, turbidity and/or fecal coliform.

[**Source:** Added at 29 Ok Reg 1044, eff 7-1-12]

252:627-1-5. General requirements for water reuse systems

(a) **Unauthorized wastes.** Suppliers shall take reasonable measures to prevent the introduction of unauthorized industrial wastewater, hazardous substances, chemicals or wastes into water reuse systems.
(b) **Protection of potable water supplies.** Suppliers shall prevent cross-connections between wastewater, water reuse and potable water supplies.
(c) **Discharges prohibited.** Suppliers shall ensure that all parts of water reuse systems are operated and maintained so that there are no unpermitted bypasses or discharges of wastewater or reclaimed water from the system. All such bypasses and/or discharges shall be considered violations of this Chapter and shall be subject to enforcement as an unpermitted discharge to waters of the state in violation of the Oklahoma Pollutant Discharge Elimination System Act.

(1) **Reporting requirement.** Suppliers shall ensure that any and all bypasses and/or discharges from water reuse systems are reported to DEQ at (800) 522-0206 within 24-hours of an incident and that a completed and signed DEQ Form 605-011 "Self Reporting Wastewater Bypass Form" is submitted to DEQ within five (5) days of the incident.

(2) **Required response.** Suppliers shall ensure that immediate action is taken to stop, contain, clean up and prevent recurrence of bypasses or discharges.

(d) **Certified operator required.** Suppliers shall have at least one certified operator employed at all times for each water reuse system. Operators shall be certified pursuant to OAC 252:710.

(e) **Noncompliance reporting.** Suppliers shall report any chlorine residual, turbidity and/or fecal coliform violations within twenty-four (24) hours from the time suppliers become aware of a violation(s) by calling DEQ at (800) 522-0206. A written report describing the reason for the violation and the steps taken to correct the violation shall be submitted to DEQ within five (5) days of discovery of the violation.

(f) **User inspection program.** A supplier may become approved by DEQ to inspect the supplier's users' storage and distribution systems in lieu of DEQ performing the inspections.

(1) **Applications.** A supplier may become approved by submitting the following to DEQ:

(A) a copy of the binding user agreement(s) between the supplier and all of its users;

(B) a copy of the supplier's proposed inspection form, which shall include:

(i) the date and time of inspection;

(ii) the name of the inspector;

(iii) whether separation distances are met;

(iv) whether all steps necessary to prevent bypasses have been taken;

(v) whether there was evidence of ponding of reclaimed water;

(vi) the application rate of reclaimed water, if applicable;

(vii) the type of vegetative cover, if applicable;

(viii) whether the area where reclaimed water is used is secure;

(ix) whether disinfection requirements are being met;

(x) whether flushing plan has been followed; and

(xi) whether the reclaimed water is being used in compliance with the permit.

(C) documentation that the supplier's inspector has completed a DEQ approved water reuse training class;

(2) **Duties.** Once approved, a supplier shall:

(A) Perform annual inspections at each of its users' reclaimed water distribution sites. The supplier shall complete and maintain on-site an inspection form for each inspection completed; and

(B) review water reuse regulations with users.

(g) **DEQ's right to inspect.** Nothing in this section shall affect DEQ's statutory right to enter and inspect users' facilities.

(h) **Use of accredited laboratories.** All laboratory analyses required to be conducted pursuant to this Chapter shall be performed by laboratories accredited by DEQ.

(i) **Separation Distances.** Buffer zones and setback distances shall be maintained in accordance with OAC 252:656-27-2-(b).

[**Source:** Added at 29 Ok Reg 1044, eff 7-1-12; Amended at 32 Ok Reg 983, eff 9-15-15]

252:627-1-6. Permitted uses of reclaimed water

The following are the permitted uses of reclaimed water by category:

(1) **Category 1.** Reserved

(2) **Category 2.** Category 2 reclaimed water shall only be used for the permitted uses in Categories 3, 4 and 5, and:

(A) drip irrigation on orchards or vineyards;

(B) spray or drip irrigation on sod farms, public access landscapes and public use areas/sports complexes, including unrestricted access golf courses;

(C) toilet and urinal flushing;

(D) fire protection systems;

(E) commercial closed-loop air conditioning systems;

(F) vehicle and equipment washing (excluding self-service car washes);

(G) range cattle watering; and

(H) make-up water for oil and gas production.

(3) **Category 3.** Category 3 reclaimed water shall only be used for the permitted uses in Categories 4 and 5, and:

(A) subsurface irrigation of orchards or vineyards;
(B) restricted access landscape irrigation;
(C) irrigation of livestock pasture;
(D) concrete mixing;
(E) dust control;
(F) aggregate washing/sieving;
(G) new restricted access golf course irrigation systems;
(H) industrial cooling towers,once-through cooling systems, and closed loop systems such as boiler feed water;
(I) restricted access irrigation of sod farms.; and
(J) hydraulic fracturing.

(4) **Category 4.** Category 4 reclaimed water shall only be used for the permitted uses in Category 5 and:

(A) soil compaction and similar construction activities; and
(B) existing restricted golf course irrigation systems utilizing water that has received primary treatment in lagoon systems. Permits to construct shall not be issued for new Category 4 restricted access golf course irrigation systems pending further research and evaluation of performance data collected from existing systems.

(5) **Category 5.** Category 5 reclaimed water shall only be used for:

(A) restricted access pasture irrigation for range cattle;
(B) restricted access irrigation of fiber, seed, forage and similar crops; and
(C) irrigation of silviculture.

(6) **Category 6.** Category 6 reclaimed water, which does not require a permit to supply, shall only be used within the wastewater treatment plant and includes:

(A) dilution water for chemicals used in the process such as polymers,coagulants, chlorination or dechlorination;
(B) mechanical seal water for gas compressors, pumps and other equipment;
(C) mechanical seal water and cooling water for pumps;
(D) odor and gas absorption including bio-filters used for odor control;
(E) centrifuge flushing;
(F) flushing grit and sludge pipes;
(G) gravity thickener make-up water;
(H) supply water for filter backwash;
(I) headworks screen washing;
(J) headworks screening washer-compactors;
(K) belt filter press;
(L) other reclaimed water that is permanently plumbed to a fixed nozzle and contained within unit operations;
(M) yard hydrants; and
(N) hose bibs.

[**Source:** Added at 29 Ok Reg 1044, eff 7-1-12; Amended at 32 Ok Reg 983, eff 9-15-15]

252:627-1-7. Annual fees for water reuse systems

(a) **Fees.** Each water reuse system shall be charged an annual fee. [See 27A O.S. § 2-3-402] The annual fee for suppliers shall be:

(1) Category 2 - $700.00
(2) Category 3 - $400.00
(3) Category 4 - $200.00
(4) Category 5 - $100.00
(5) Water reuse systems will be charged an additional $50.00 per user if the supplier does not have a DEQ approved inspection program.

(b) **Due date.** Suppliers shall submit payment of the fees within thirty (30) days of receipt of invoices mailed by DEQ.

[**Source:** Added at 29 Ok Reg 1044, eff 7-1-12]

SUBCHAPTER 3. OPERATION AND MAINTENANCE

252:627-3-1. Distribution system

(a) **Maintenance.** Suppliers shall maintain the structural integrity of all parts of the distribution system and maintain it in good working order.
(b) **Connections.** Suppliers shall maintain the integrity of the distribution system by inspecting all connections to the distribution system.
(c) **Erosion control.** Suppliers shall provide erosion protection for all parts of the distribution system located in or near waterways or flood plains.
(d) **Pump stations.** Suppliers shall ensure that pump stations are properly maintained and operated by doing the following:

(1) Securing pump stations to prevent unauthorized access.
(2) Maintaining the pumps in working condition.
(3) Keeping the screens free of debris to prevent clogging.
(4) Maintaining the required alarms in working order.
(5) Maintaining the required back-up generators and/or portable engine driven pumps in working order.
(6) Maintaining a complete set of operational instructions, emergency procedures and maintenance schedules.

(e) **Flushing Plan.** Suppliers shall have and implement comprehensive plans, approved by DEQ, for flushing reclaimed water within storage and distribution systems pursuant to OAC 252:656-27-4(e). Flushing plans shall also be included in the reclaimed water systems' O&M manuals [OAC 252: 656-3-10] and in the suppliers' DEQ approved inspection programs [OAC 252:627-1-5(f)].
(f) **Flow Measurement.** Supplier shall maintain flow measuring device in proper working order.

[**Source:** Added at 29 Ok Reg 1044, eff 7-1-12; Amended at 32 Ok Reg 983, eff 9-15-15]

252:627-3-2. Requirements for using Category 2 reclaimed water

(a) **Operation and maintenance.** The following operation and maintenance requirements shall apply to areas where Category 2 reclaimed water is used:

(1) **Legal access to site.** Suppliers shall have continued legal access to all areas where Category 2 reclaimed water from suppliers' systems is used.
(2) **Equipment maintenance.** Suppliers shall ensure that all distribution and irrigation equipment is maintained in working order.

(b) **Restrictions.** Suppliers shall ensure that Category 2 reclaimed water is not used:

(1) on any food crop that may be consumed raw;
(2) on processed food crops such as corn, wheat and oats, less than thirty (30) days before harvest;
(3) for spray irrigation on orchards or vineyards;
(4) at rates that allow discharge from irrigation sites;
(5) at a rate that exceeds the nitrogen and phosphorus uptake rates for the crop at the site;
(6) at rates that result in phytotoxicity;
(7) during periods of precipitation or while the soil is saturated or frozen;
(8) on land having a slope greater than five percent (5%);
(9) where there are berms or other barriers on a water reuse site that would cause the pooling or ponding of reclaimed water at the site, nor shall any berms or barriers impede the natural flow of stormwater from the site;
(10) on public use areas that have a high potential for skin to ground contact (e.g., football fields, sports complexes, playgrounds, etc.) when in use by the public; and
(11) at any location not authorized by the state in the permit.

[**Source:** Added at 29 Ok Reg 1044, eff 7-1-12]

252:627-3-3. Requirements for using Categories 3 and 4 reclaimed water

(a) **Operation and maintenance.** The following operation and maintenance requirements shall apply to areas where Categories 3 or 4 reclaimed water is used:

(1) **Legal access to site.** Suppliers shall have continued legal access to all areas that are being irrigated with Category 3 or 4 reclaimed water.

(2) **Equipment maintenance.** Suppliers shall ensure that all distribution and irrigation equipment is maintained in working order.

(b) **Restrictions.** Suppliers shall ensure that Category 3 or 4 reclaimed water is not used:

(1) from a lagoon cell that receives raw sewage;

(2) on public use areas that have a high potential for skin to ground contact (e.g., football fields, sports complexes and playgrounds);

(3) on golf courses unless irrigation takes place when the public is not allowed to access the sites;

(4) on any food crop that may be consumed raw;

(5) for spray irrigation on orchards or vineyards;

(6) at rates that allow a discharge from the permitted irrigation site;

(7) within one hundred feet (100') of the permitted boundary of the site;

(8) at a rate that exceeds the nitrogen and phosphorus rates for the crop at the site;

(9) at a rate that results in phytotoxicity;

(10) when the dissolved oxygen concentration for Category 4 reclaimed water is less than 2.0 mg/l;

(11) during periods of precipitation or while the soil is saturated or frozen;

(12) on land having a slope greater than five percent (5%);

(13) where there are berms or other barriers on a water reuse site that would cause the pooling or ponding of reclaimed water at the site, nor shall any berms or barriers impede the natural flow of stormwater from the site;

(14) on public use areas during times of use; and

(15) on sod farms unless a period of 30 (thirty) days has elapsed between the last application of Category 3 reclaimed water and harvesting of sod. [See OAC 252:627-1-6(3)(I)]

[**Source:** Added at 29 Ok Reg 1044, eff 7-1-12; Amended at 32 Ok Reg 983, eff 9-15-15]

252:627-3-4. Requirements for using Category 5 reclaimed water

(a) **Operation and maintenance.** The following operation and maintenance requirements shall apply to areas where Category 5 reclaimed water is used for irrigation:

(1) **Fencing.** Suppliers are responsible for ensuring that any required fencing is maintained in order to prevent unauthorized access to the site.

(2) **Signs.** Suppliers are responsible for ensuring that the required signs, which describe the nature of the facility and advise against trespassing are posted on or near the fence on each side of the water reuse site.

(3) **Legal access and control of site.** Suppliers shall ensure that Category 5 reclaimed water is applied on sites to which suppliers have legal access and control pursuant to the provisions of OAC 252:656-25-2(d).

(4) **Prohibition in public use area.** Category 5 reclaimed water shall not be applied to any public use areas.

(5) **Equipment maintenance.** Suppliers shall ensure that all irrigation equipment is maintained and in working order.

(b) **Restrictions.** Suppliers shall not irrigate with Category 5 reclaimed water:

(1) from a lagoon cell that receives raw sewage;

(2) from any cell other than the one specified in the permit;

(3) on any food crop that may be consumed raw;

(4) on grain crops such as corn, wheat and oats, less than thirty (30) days before harvest;

(5) at rates that allow a discharge from the permitted water reuse site;

(6) within one hundred feet (100') of the permitted boundary of the site;

(7) at a rate that exceeds the nitrogen and phosphorus rates for the crop grown at the site;
(8) at a rate that results in phytotoxicity;
(9) when the reclaimed water has a dissolved oxygen concentration of less than 2.0 mg/l;
(10) during periods of precipitation or while the soil is saturated or frozen;
(11) on land having a slope greater than five percent (5%); and
(12) where there are berms or other barriers on a water reuse site that would cause the pooling or ponding of reclaimed water at the water reuse site, nor shall any berms or barriers impede the natural flow of stormwater from the site.

[**Source:** Added at 29 Ok Reg 1044, eff 7-1-12]

252:627-3-5. Requirements for using Category 6 reclaimed water Signs

Yard hydrants and hose bibs must have signs containing the cautionary language found in OAC 252:656-27-4(a).

[**Source:** Added at 32 Ok Reg 983, eff 9-15-15]

SUBCHAPTER 5. SAMPLING, RECORD KEEPING AND REPORTING REQUIREMENTS

252:627-5-1. Sampling, reporting and record keeping requirements

(a) **Sampling.** Suppliers shall comply with the sampling requirements in Appendix A. However, Category 6 reclaimed water shall not require separate sampling but shall meet effluent limits pursuant to the OPDES permit and meet Best Management Practices as required in OAC 252:656-3-10 Operation and Maintenance Manual.

(b) **Completing MORs.** Suppliers shall complete DEQ Form 627-001 "Water Reuse System Monthly Operation Report" ("MOR") for each month. The MOR shall contain the following information:

(1) The estimated volume of reclaimed water produced and distributed to each end user;
(2) The results of each sampling event and:
(A) the name of the person taking each sample,
(B) the date and time of sampling,
(C) the date and time the analysis began, and
(D) the name of the laboratory doing the analysis.
(3) The weather conditions during the reuse period;
(4) The type of crop, grass or vegetation irrigated with the reclaimed water, if applicable; and
(5) The loading rates at each water reuse site to verify that agronomic rates are not being exceeded.

(c) **Submission of MORs.** Categories 2 and 4 reclaimed water suppliers shall submit MORs to DEQ by the fifteenth (15^{th}) day of the following month.

(d) **Retention of MORs.** All suppliers of reclaimed water shall maintain MORs on-site for three (3) years and make them available to DEQ upon request

(e) **Record keeping.** Suppliers shall keep all records, including all maintenance records, on site for at least three (3) years and available for review by DEQ upon request.

(f) **Additional reporting, records and/or sampling.** Additional sampling, reporting, and/or records requirements may be included by DEQ in any permit, authorization, order, consent decree, closure plan, remediation plan, or other official document issued by DEQ pursuant to applicable law and the provisions of this Chapter.

[**Source:** Added at 29 Ok Reg 1044, eff 7-1-12; Amended at 32 Ok Reg 983, eff 9-15-15]

APPENDIX A. Testing Frequency and Limits for Water Reuse Systems

Figure 1

Category	Testing Frequency	Limits	MORs
1	Reserved	Reserved	Reserved
2	Turbidity: Continuous	Turbidity shall not exceed the following: • Daily average 2 NTU[1] • 5 NTU >5% of the daily maximum per month[2] • 10 NTU at any time	Supplier Submit MORs to DEQ
	Chlorine disinfection at POE: Continuous	(1) Free available chlorine residual shall always be ≥ 1.0 ppm at POE to distribution system and following any subsequent storage or treatment **OR** The chlorine residual at the POE to the distribution system and following any subsequent storage or treatment shall be at a level to prevent growth of slime and regrowth of pathogens in the distribution and storage systems as determined by an approved chlorine decay rate model pursuant to OAC 252:656-3-4 (b)(7)(C) **AND** (2) Free available chlorine residual at the end-of-pipe shall always be ≥ 0.20 mg/l **OR** Combined chlorine residual at the end-of-pipe shall always be ≥ 0.50 mg/l	
	Chlorine disinfection at end-of-pipe: Daily		
	Fecal Coliform: Daily	Fecal Coliform: No detectable fecal coliform organisms in four of the last seven daily samples, single sample maximum ≤ 23 cfu/100 ml	
	Nitrogen/Phosphorous: Monthly	≤ most stringent agronomic rate	
	CBOD5: Weekly	< 5.0 mg/l	
3	Chlorine disinfection: Every 12 hours	Free available chlorine residual at the POE to the distribution system and following any subsequent storage or treatment shall always be ≥ 0.20 ppm **OR** Combined chlorine residual at the POE to the distribution system and following any subsequent storage or treatment shall always be ≥ 0.50 mg/l	Supplier Maintain MORs On Site
	Fecal coliform: 3 per week	• Monthly geometric mean of < 200 cfu/100 ml • Single sample maximum < 400 cfu/100 ml	
	Nitrogen/Phosphorous: Monthly	≤ most stringent agronomic rate	
	BOD5 or CBOD5: Weekly	< 20 mg/l	
4	Fecal coliform: Weekly	• Monthly geometric mean of < 200 cfu/100 ml • Single sample maximum < 800 cfu/100 ml	Supplier Submit MORs to DEQ
	Chlorine disinfection: Daily	Free available chlorine residual at the POE to the distribution system and following any subsequent storage or treatment shall always be ≥ 0.20 ppm **OR** Combined chlorine residual at the POE to the distribution system and following any subsequent storage or treatment shall always be ≥ 0.50 mg/l	
	Dissolved oxygen: Weekly	>2.0 mg/l	
5	None		Supplier Maintain MORs On Site

Figure 2

[1] The daily mean operating filter effluent turbidity (continuously monitored) is calculated as the average of turbidity measures at ≤ 1.2 hour intervals over 24 hours, and must be reported monthly.

[2] The maximum 24 hour turbidity must be based on highest measure from continuous monitoring taken at ≤ 1.2 hour intervals over 24 hours.

[**Source:** Added at 29 Ok Reg 1044, eff 7-1-12]