be elected, or to distribute such number of votes among any two or more candidates for such election.

8. Upon the issuance for money or other consideration of any shares of capital stock of the corporation, or of any security convertible into capital stock of the corporation, no holder of shares of the capital stock, irrespective of the class or kind thereof, shall have any preemptive or other right to subscribe for, purchase or receive any proportionate or other amount of such shares of capital stock, or such security convertible into capital stock, proposed to be issued; and the board of directors may cause the corporation to dispose of all or any of such shares of capital stock, or of any such security convertible into capital stock, as and when said board may determine, free of any such right, either by offering the same to the corporation's then shareholders or by otherwise selling or disposing of such shares of other securities, as the board of directors may deem advisable.

Junior Preferred Stock

- 9. The Junior Preferred Stock is not entitled to receive or participate in any dividends, and no dividends shall be paid thereon.
- 10. Subject to the limitations set forth in these Restated Articles of Incorporation and subject to the rights of any other classes of stock of the corporation that may be senior in right to the Junior Preferred Stock, in the event of any dissolution, liquidation or winding up of the corporation, whether voluntary or involuntary, before any distribution or payment shall be made to the holders of the Common Stock, the holder of the Junior Preferred Stock shall be entitled to be paid out of the net assets of the corporation available for distribution to its shareholders one hundred dollars (\$100.00) and no more. For purposes of this section, a consolidation, merger or amalgamation of the corporation with or into any other corporation or corporations shall not be deemed to be a dissolution, liquidation or winding up of the corporation, whether voluntary or involuntary.
- 11. So long as the share of Junior Preferred Stock is outstanding, the corporation shall not (a) file a petition for relief under the United States Bankruptcy Code or (b) authorize its subsidiaries (collectively, the "Regulated Utilities") to file a petition for relief under the United States Bankruptcy Code (any of the foregoing a "Voluntary Bankruptcy Filing") without the consent of the holder of the Junior Preferred Stock, which consent may be effected in the following manner: the corporation shall give the holder of the Junior Preferred Stock written notice ("Notice") at least five business days before making any proposed Voluntary Bankruptcy Filing. The holder of the Junior Preferred Stock may object to and oppose the Voluntary Bankruptcy Filing by providing written notice of such objection and opposition (an "Objection Notice") to the Secretary of the corporation within five business days after receipt of the Notice. The Objection Notice shall specify the reasons the holder of the Junior Preferred Stock does not consent to the proposed Voluntary Bankruptcy Filing. If the Secretary receives such an Objection Notice within the five business day period, then the corporation shall not submit or file or, with respect to any Regulated Utility, approve any such Voluntary Bankruptcy Filing. If the corporation does not receive an Objection Notice within the five business day period, the holder of the Junior Preferred Stock will be deemed to have consented to the Voluntary Bankruptcy Filing.

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- 12. No person other than the corporation and the holder of the Junior Preferred Stock will have any contractual rights with respect to the Junior Preferred Stock. Except as provided by applicable law, the holder of the Junior Preferred Stock is entitled to receive notice from the corporation of each meeting of shareholders at which any Voluntary Bankruptcy Filing is proposed to be considered, but shall not be entitled to notice of any other meeting or vote of the shareholders. Notwithstanding the foregoing provisions, the holder of the Junior Preferred Stock shall have no voting rights at any time when the Oregon Public Utilities Commission (the "Commission") has consented to the redemption of the Junior Preferred Stock pursuant to subdivision III. B.13 below (and regardless of whether there may then exist any restriction not set forth in said subdivision III. B.13 on the corporation's ability to redeem the Junior Preferred Stock). Except as provided herein or as otherwise provided by law, the holder of the Junior Preferred Stock has no voting rights for any other purpose.
- 13. The Junior Preferred Stock may be redeemed by the corporation, at its election expressed by resolution of the Board of Directors, at any time; provided, that the corporation shall not redeem the Junior Preferred Stock without the prior consent of the Commission. The Junior Preferred Stock will be redeemed in full upon notice thereof given to the holder of the Junior Preferred Stock and the payment of the redemption price of one hundred dollars (\$100.00). Following such redemption, the holder of the Junior Preferred Stock shall deliver the certificate representing the Junior Preferred Stock to the corporation for cancellation; provided, however, that the delivery of such certificate to the corporation shall not be required as a condition to the redemption, and the Junior Preferred Stock will cease to be outstanding and all rights and obligations of the holder thereof will cease upon notice and payment as aforesaid, whether or not the certificate representing the Junior Preferred Stock has been so delivered to the corporation.
- 14. The holder of the Junior Preferred Stock must be, during the period of ownership, "independent" as defined in the stipulation approved by Oregon Public Utility Commission Order 17526 effective December 28, 2017 and any supplement or amendment to such stipulation (the "Condition of Eligibility"). If at any time the holder of the Junior Preferred Stock (a "prior holder") (a) does not meet the Condition of Eligibility, as determined in good faith by the corporation, (b) gives notice to the corporation of such holder's intent to resign, or (c) if the holder is natural person or is an entity that has only a single member or shareholder who is a natural person and the holder or its member or shareholder dies, become disabled, or otherwise is unable to effectively carry out the responsibilities of the holder of the Junior Preferred Stock, in each case as determined in good faith by the corporation, the corporation shall appoint another person to hold the Junior Preferred Stock (a "successor holder"). In addition, the corporation may appoint a successor holder, provided the successor holder meets the Condition of Eligibility, at any time prior to delivering a Notice. Upon notice to the prior holder by the corporation of the appointment of a successor holder and of the effective date thereof, the successor holder shall become the sole holder of the Junior Preferred Stock and the prior holder shall have no further rights and obligations with respect thereto. On or promptly following the effective date of the appointment of a successor holder, the prior holder shall deliver the certificate representing the Junior Preferred Stock to the corporation for reissuance to the successor holder; provided, however, that the delivery of such certificate to the corporation will not be required as a condition to the appointment of the successor holder. The holder of the Junior Preferred Stock shall give notice to the Secretary of the corporation of any failure to meet the Condition of Eligibility and of such holder's desire to resign, and the authorized representative of such holder shall

give notice to the Secretary of the corporation of the death or disability of such holder, promptly following the determination or occurrence thereof. The holder of the Junior Preferred stock shall have no right to transfer the Junior Preferred Stock to any person except as provided in this subdivision III.B.14 or as otherwise consented to by the corporation. The stock certificate or other evidence of ownership of the Junior Preferred Stock shall bear a legend or other prominent notice of the restrictions contained in this subdivision III.B.14.

- 15. The Junior Preferred Stock shall not be convertible into Common Stock or any other class or series of securities issued by the corporation.
- 16. Except as provided herein, if the corporation redeems, purchases or otherwise acquires the Junior Preferred Stock, the corporation shall cancel and not reissue the Junior Preferred Stock.

ARTICLE IV

- A. The business and affairs of the corporation shall be managed by a board of directors. Except as provided in subdivision B. below, the number of members of the board, their classifications and terms of office, and the manner of their election and removal shall be as follows:
 - 1. The number of directors shall be that number, not less than nine or more than fourteen, determined from time to time by resolution adopted by affirmative vote of a majority of the entire board of directors. The directors shall be divided into three classes, designated Class I, Class II, and Class III. Each class shall consist, as nearly as possible, of one-third of the total number of directors. At the 1984 annual meeting of shareholders, Class I directors shall be elected for a one-year term, Class II directors for a two-year term, and Class III directors for a three-year term. At each succeeding annual meeting of shareholders, successors to directors whose terms expire at that annual meeting shall be of the same class as the directors they succeed, and shall be elected for three-year terms. If the number of directors should be changed by resolution of the board of directors, any increase or decrease shall be apportioned among the classes so as to maintain the number of directors in each class as nearly equal as possible, but in no case shall a decrease in the number of directors shorten the term of any incumbent director.
 - 2. A director shall hold office until the annual meeting for the year in which his or her term shall expire and until his or her successor shall have been elected and qualified, subject, however, to prior death, resignation, retirement or removal from office. Any newly created directorship resulting from an increase in the number of directors and any other vacancy on the board of directors, however caused, may be filled by the affirmative vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director.
 - 3. One or more of the directors may be removed with or without cause by unanimous written consent of holders of the shares entitled to vote thereon or by the affirmative vote of the holders of not less than two-thirds of the shares entitled to vote thereon at a meeting of the shareholders called expressly for that purpose; provided, however, that for as long as the corporation shall have cumulative voting, if fewer than all the directors should be candidates for removal, no one of them shall be removed if the votes cast against his or her removal

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would be sufficient to elect him or her if then cumulatively voted at an election of the class of directors of which he or she shall be a part.

- 4. No person, except those persons nominated by the board, shall be eligible for election as a director at any annual or special meeting of shareholders unless a written request that his or her name be placed in nomination shall be received from a shareholder of record entitled to vote at such election by the secretary of the corporation not later than the latter of (a) the thirtieth day prior to the date fixed for the meeting, or (b) the tenth day after the mailing of notice of that meeting, together with the written consent of the nominee to serve as a director.
- B. Notwithstanding the provisions of subdivision A. above, whenever the holders of any one or more classes of the capital stock of the corporation shall have the right, voting separately as a class or classes, to elect directors at an annual or special meeting of shareholders, the election, term of office, filling of vacancies and other features of such directorships shall be governed by the provisions of these Restated Articles of Incorporation applicable thereto. Directors so elected shall not be divided into classes unless expressly provided by such provisions, and during their prescribed terms of office, the board of directors shall consist of such directors in addition to the directors determined as provided in subdivision A. above.
- C. This Article IV may not be repealed or amended in any respect unless such action shall be approved by unanimous written consent of holders of the shares entitled to vote thereon or by the affirmative vote of the holders of not less than two-thirds of the shares entitled to vote at an election of directors determined as provided in subdivision A. above, at a meeting of the shareholders called expressly for that purpose.

ARTICLE V

No director of the corporation shall be personally liable to the corporation or its shareholders for monetary damages for conduct as a director; provided that this Article VI shall not eliminate the liability of a director for any act or omission for which such elimination of liability is not permitted under the Oregon Business Corporation Act. No amendment to the Oregon Business Corporation Act that further limits the acts or omissions for which elimination of liability is permitted shall affect the liability of a director for any act or omission which occurs prior to the effective date of such amendment.

ARTICLE VI

The corporation shall indemnify to the fullest extent then permitted by law any person who is made, or threatened to be made, a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative, investigative or otherwise (including an action, suit or proceeding by or in the right of the corporation) by reason of the fact that the person is or was a director or officer of the corporation or is or was serving at the request of the corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise against all judgments, amounts paid in settlement, fines and such expenses (including attorneys' fees), actually and reasonably incurred in connection therewith. This Article shall not be deemed exclusive of any other provisions for indemnification of directors and officers that may be included in any statute, bylaw, agreement, vote of shareholders or directors or otherwise, both as to action in any official capacity and as to action in another capacity while holding an office.

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Exhibit 3b

ARTICLE VII

The initial physical address for the Corporation is One Pacific Square, 220 NW Second Avenue, Portland, Oregon 97209, Attn: General Counsel. David H. Anderson is an authorized individual with direct knowledge of the operations and business activities of the Corporation.

ANNUAL INCENTIVE PLAN NW Natural Gas Storage LLC ("company", or "the company")

PURPOSE

The purpose of the Annual Incentive Plan (AIP) is to recognize and reward Non-Bargaining Unit (NBU) employees who have performed well and contributed to successful company performance as measured by key performance indicators.

PROGRAM TERM

This Plan is an annual incentive plan and each new calendar year commences a new Program Term. Each Program Term will begin on January 1 and conclude on December 31.

PARTICIPATION

All NBU regular employees of the company are eligible to participate in the Annual Incentive Plan. For all purposes of this AIP, a person who is an employee of Northwest Natural Gas Company (NW Natural) on full-time assignment to the company and designated by the Company Board of Directors (BOD) shall be considered to be a regular employee of the company during the period of that full-time assignment. In these situations, a designated participant in this AIP shall not be eligible for incentive compensation from NW Natural.

NW Natural Oversight

If the President of NWNGS is considered by NW Natural to be an executive officer of NW Natural for purposes of public disclosure, any decision of the BOD under this AIP that affects an award to the President shall be subject to and conditioned upon the approval of that decision by the Board of Directors of NW Natural or as delegated by the Board of Directors of NW Natural to the Organization and Executive Compensation Committee.

To be eligible for an award the Participant must have been employed by the company in an NBU role for at least one month during the Program Term. In addition, the Participant must be employed on the date of the plan payout to be eligible for any award for the Program Term unless the Participants' employment is terminated prior to the payout date of the Program Term due to one of the following: retirement(*), disability or death, Board approved exception due disposition of an affiliated business which results in the participant's termination of employment with NWNGS. Prorated awards will be determined by prorating the Participant's final award by the number of days employed during the Program Term. In the case of a Board approved exception due to disposition of an affiliated business occurring during the Program Term, the participant's prorated award will be based upon their target award and not actual Company performance for the Program Term. Such award will be paid within thirty (30) days following

the completion of the transition period as defined by the Board. The disposition of Gill Ranch Storage qualifies as Board approved and the Board will define the end of the transition period. However, participating employees with Company approved Retention Agreements, will be eligible for prorated AIP awards consistent with such agreements.

Employees who transfer to or from employment or full-time assignment to Northwest Natural or another subsidiary will be eligible for a prorated award based upon the number of days they were eligible to participate in the AIP.

(*) Retirement is defined as a minimum of 5 years of service (with the company or with an affiliate company) and age and service equals 70.

INCENTIVE TARGETS

Target incentive award opportunities will be established by salary grade for each Plan Year and approved by the Board of Directors. The target incentive levels for each salary grade are shown in Exhibit I to the Plan document for the Plan Year. The target incentive opportunity is assigned by salary grade and calculated by multiplying the Target Incentive percentage times the following for each employee category:

NBU Salary Paid/Exempt - Annual Base Salary as of December 31st of the plan year

NBU Hourly Paid/Non-Exempt – Actual eligible earnings, including regular pay, overtime pay, & lump sum merit payments INCENTIVE FORMULA

The formula for calculating the incentive award for the Program Term is as follows:

Participant Award =

Target Award X ((CPF X CPF Factor Weight) + (IPF X IPF Factor Weight))

COMPANY PERFORMANCE FACTOR (CPF)

The company performance goals in the Plan are intended to align the interest of Participants with those of the company. The goals and the formula for determining the Company Performance Factor will be established by the NW Natural Gas Storage, LLC Board of Directors (the "Board of Directors") at the start of each Program Term and set forth as Exhibit II. After the goals and formula are established for a Program Term, the Board of Directors retains discretion to modify the goals and formula, including adjusting the calculation of any financial or other goal to eliminate the effects of significant extraordinary, non-recurring or unplanned items.

INDIVIDUAL PERFORMANCE FACTOR (IPF)

The IPF weight used in calculating the Individual Performance Factor will be established for each Participant by the President, subject to the approval of the Board of Directors at the beginning of the Program Term. Individual goals for each Participant will be established by the Participant's leader (subject to the approval of the President, and for the President subject to the approval of the Board of Directors) at the beginning of each Program Term. Performance against these goals will be assessed by the Participant's leader at the end of the Program Term (subject to the approval of the President, and for the President subject to the approval of the Board of Directors). This assessment will result in a rating on a scale of 0 to 1.5 (the "Individual Performance Factor"). The Participant will not receive an award if the Individual Performance Factor is less than 0.5.

ADMINISTRATION

Awards will be calculated and paid no later than March 15 following the end of the Program Term. Awards are subject to tax withholding unless the Participant made a prior election to defer the Award under the terms of the NW Natural Gas Company Deferred Compensation Plan for Directors and Executives if they are eligible for this plan. All awards shall be audited and approved by the Board of Directors prior to payment.

The Plan shall be administered by the Board of Directors. Except to the extent provided under "NW Natural Oversight" above. The Board of Directors shall have the exclusive authority and responsibility for all matters in connection with the operation and administration of the Plan. Except to the extent provided under "NW Natural Oversight: above. Decisions by the Board of Directors shall be final and binding upon all parties affected by the Plan, including the beneficiaries of Participants.

The Board of Directors may rely on information and recommendations provided by management. The Board of Directors may delegate to management the responsibility for decisions that it may make or actions that it may take under the terms of the Plan, subject to the Board of Directors reserved right to review such decisions or actions and modify them when necessary or appropriate under the circumstances. The Board of Directors shall not allow any employee to obtain control over decisions or actions that affect that employee's Plan benefits.

AMENDMENTS AND TERMINATION

The Board of Directors has the power to terminate this Plan at any time or to amend this Plan at any time and in any manner that it may deem advisable.

As amended effective October 1, 2018

NORTHWEST NATURAL GAS COMPANY EXECUTIVE ANNUAL INCENTIVE PLAN

This amended Executive Annual Incentive Plan (the "Plan") is executed by Northwest Natural Gas Company, an Oregon corporation (the "Company"), effective October 1, 2018. Effective October 1, 2018, the Company became a wholly-owned subsidiary of Northwest Natural Holding Company ("Parent") and holders of Company common stock became holders of Parent common stock ("Parent Common Stock").

PURPOSE OF PLAN

The success of the Company is dependent upon its ability to attract and retain the services of key executives of the highest competence and to provide incentives for superior performance. The purpose of the plan is to advance the interests of the Company and its shareholders through an incentive compensation program that will attract and retain key executives and motivate them to achieve performance goals.

PROGRAM TERM

This Plan is an annual incentive plan and each new calendar year commences a new Program Term. Each Program Term will begin on January 1 and conclude on December 31.

PARTICIPATION

All executive officers of the company and any other highly compensated employees as designated by the Company's Organization and Executive Compensation Committee (the "Committee") are eligible to receive awards ("Awards") under the Executive Annual Incentive Plan.

At the beginning of each Program Term, the Committee shall determine eligibility for Awards and establish for each participant, the target incentive level as a percentage of year-end annualized based salary ("Target Award"). This information will be set forth in Exhibit I of the Plan document for the Program Term. Each such participating employee shall be referred to as a "Participant."

To be eligible for payout of an Award the Participant must have a minimum of three months of service during the Program Term. If the Participant is a new employee or is newly eligible to participate in the Plan, that Participant must be in an eligible position on or before September 30 of the Program Term and will receive a prorated Award. In addition, the Participant must be employed by the Company or Parent on December 31 of the Program Term to be eligible for payout of the Award for the Program Term unless the Participant is eligible for a prorated Award as provided in the next sentence. Eligibility for a prorated Award occurs when a Participant has

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three or more months of participation in the Program Term but the Participant's employment is terminated prior to December 31 of the Program Term due to one of the following: Retirement (unless such Retirement results from a termination of the Participant's employment by the Company or Parent for Cause), disability and death. Prorated Awards will be determined by prorating the Participant's final Award by the number of days employed during the Program Term.

"Retirement" shall mean termination of employment after Participant is (a) age 62 with at least five years of service as an employee of the Company and Parent, or (b) age 55 with age plus years of service (including fractions) as an employee of the Company and Parent totaling at least 70.

"Cause" shall mean (a) the willful and continued failure by a Participant to perform substantially the Participant's assigned duties with the Company or Parent (other than any such failure resulting from incapacity due to physical or mental illness) after a demand for substantial performance is delivered to the Participant by the Company or Parent which specifically identifies the manner in which the Participant has not substantially performed such duties, (b) willful commission by a Participant of an act of fraud or dishonesty resulting in economic or financial injury to the Company or Parent, (c) willful misconduct by a Participant that substantially impairs the Company's or Parent's business or reputation, or (d) willful gross negligence by a Participant in the performance of his or her duties.

In the event of a change in job position during the Program Term, the Committee may, in its discretion, increase or decrease the amount of a Participant's Award to reflect such change.

INCENTIVE FORMULA

The formula for calculating Awards for each Program Term is as follows:

COMPANY PERFORMANCE FACTOR

The Company performance goals in the Plan are intended to align the interest of Participants with those of the shareholders. The goals and the formula for determining the Company Performance Factor will be established by the Committee at the start of each Program Term and set forth as Exhibit II. The Committee may, at any time, approve adjustments to the calculation of the results under any Company performance goal to take into account such unanticipated circumstances or significant, non-recurring or unplanned events as the Committee may determine in its sole discretion, and such adjustments may increase or decrease the results. Possible circumstances that may be the basis for adjustments shall include, but not be limited to, any change in applicable accounting rules or principles; any gain or loss on the disposition of a business; impairment of assets; dilution caused by acquiring a business; tax changes and tax

impacts of other changes; changes in applicable laws and regulations; changes in rate case timing; changes in the Company's structure; and any other circumstances outside of management's control.

PRIORITY/INDIVIDUAL PERFORMANCE FACTOR

The P/IPF weight used in calculating the Priority/Individual Performance Factor will be established for each Participant by the Committee at the beginning of the Program Term and set forth as part of Exhibit I. Also included in Exhibit I will be the CPF Factor Weight for the Company Performance Factor. Priority/Individual goals for each Participant will be established at the beginning of each Program Term and performance against these goals will be assessed by the Participant's superior and approved by the C.E.O. at the end of the Program Term. This assessment will result in a rating on a scale of 0% to 175%. This rating is called the Priority/Individual Performance Factor. The Participant will not receive a payout under the Priority/Individual Performance component of an Award if the Priority/Individual Performance Factor is less than 50%.

ADMINISTRATION

Award payouts will be calculated and paid no later than the March 15 following the end of the Program Term. Award payouts are subject to tax withholding unless the Participant made a prior election to defer the Award payout under the terms of the Deferred Compensation Plan for Directors and Executives ("DCP").

All Award payouts shall be audited by the Internal Audit department and approved by the Committee prior to payment.

The Plan shall be administered by the Committee. The Committee shall have the exclusive authority and responsibility for all matters in connection with the operation and administration of the Plan. Decisions by the Committee shall be final and binding upon all parties affected by the Plan, including the beneficiaries of Participants.

The Committee may rely on information and recommendations provided by management. The Committee may delegate to management the responsibility for decisions that it may make or actions that it may take under the terms of the Plan, subject to the Committee's reserved right to review such decisions or actions and modify them when necessary or appropriate under the circumstances. The Committee shall not allow any employee to obtain control over decisions or actions that affect that employee's Plan benefits.

RECOUPMENT ON EARNINGS RESTATEMENT

If at any time before a Change in Control and within three years after the payout of Awards for a Program Term, Parent's financial statements for that Program Term are the subject of a restatement due to the Misconduct of any person, each Participant who received an Award payout for that Program Term (whether or not such Participant was personally involved in such Misconduct) shall repay to the Company the Excess Bonus Compensation (as defined below). For purposes of the Plan, "Excess Bonus Compensation" for any Participant means the positive

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difference, if any, between (i) the Participant's Award payout as originally calculated, and (ii) the Participant's Award payout as recalculated with the results for Company performance goals being based on Parent's financial statements as restated. Excess Bonus Compensation shall not include any amounts in respect of any individual performance goals or in respect of Company performance goals that are not measured in whole or in part on financial results reported in Parent's financial statements. The Committee may, in its sole discretion, reduce the amount of Excess Bonus Compensation to be repaid by any Participant to take into account the tax consequences of such repayment for the Participant.

If any portion of an Award payout was deferred under the DCP, any Excess Bonus Compensation to be repaid with respect to that Award shall first be recovered by canceling all or a portion of the amount so deferred under the DCP and any interest credited under the DCP with respect to such cancelled amount. The Company may seek direct repayment from the Participant of any Excess Bonus Compensation not so recovered and may, to the extent permitted by applicable law, offset such Excess Bonus Compensation against any compensation or other amounts owed by the Company to the Participant. In particular, Excess Bonus Compensation may be recovered by offset against the after-tax proceeds of deferred compensation payouts under the DCP, the Company's Executive Supplemental Retirement Income Plan or the Company's Supplemental Executive Retirement Plan at the times such deferred compensation payouts occur under the terms of those plans. Excess Bonus Compensation that remains unpaid for more than 60 days after demand by the Company shall accrue interest at the rate used from time to time for crediting interest under the DCP.

"Misconduct" shall mean (a) willful commission by any person of an act of fraud or dishonesty or (b) willful gross negligence by any person in the performance of his or her duties.

"Change in Control" shall mean the occurrence of any of the following events:

(a) The consummation of:

- (i) any consolidation, merger or plan of share exchange involving Parent (a "Merger") as a result of which the holders of outstanding securities of Parent ordinarily having the right to vote for the election of directors ("Voting Securities") immediately prior to the Merger do not continue to hold at least 50% of the combined voting power of the outstanding Voting Securities of the surviving corporation or a parent corporation of the surviving corporation immediately after the Merger, disregarding any Voting Securities issued to or retained by such holders in respect of securities of any other party to the Merger;
- (ii) any consolidation, merger, plan of share exchange or other transaction involving the Company as a result of which Parent does not continue to hold, directly or indirectly. at least 50% of the outstanding securities of the Company ordinarily having the right to vote for the election of directors; or
- (iii) any sale, lease, exchange or other transfer (in one transaction or a series of related transactions) of all, or substantially all, the assets of Parent or the Company;
- (b) At any time during a period of two consecutive years, individuals who at the beginning of such period constituted Parent's Board of Directors ("Incumbent Directors") shall

Exhibit 10o

cease for any reason to constitute at least a majority thereof; provided, however, that the term "Incumbent Director" shall also include each new director elected during such two-year period whose nomination or election was approved by two-thirds of the Incumbent Directors then in office; or

(c) Any person (as such term is used in Section 14(d) of the Securities Exchange Act of 1934, other than Parent or any employee benefit plan sponsored by Parent) shall, as a result of a tender or exchange offer, open market purchases or privately negotiated purchases from anyone other than Parent, have become the beneficial owner (within the meaning of Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of Voting Securities representing twenty percent (20%) or more of the combined voting power of the then outstanding Voting Securities.

AMENDMENTS AND TERMINATION

The Board has the power to terminate this Plan at any time or to amend this Plan at any time and in any manner that it may deem advisable.

IN WITNESS WHEREOF this Plan was duly amended effective as of October 1, 2018.

NORTHWEST NATURAL GAS COMPANY

By: /s/ DAVID H. ANDERSON
David H. Anderson
President and Chief Executive Officer

Exhibit I Effective January 1, 2021

Participants, Target Awards and Individual Performance
Program Term: January 1, 2021 – December 31, 2021

Exhibit II

Company Performance Factor Program Term: January 1, 2021 – December 31, 2021

Company Performance Factor Formula:

Net Income Component	X 71.43%)	+	[Operations Component	X 28.57%	=	Company Performance Factor
						lote 1 below using	Hold	ling Company
2021	NI Results					·	Comp	onent
						0%_		
								
								
						175%		
on NI Component								
-	n ahove will be in	ntern	olate	d us	ing the formula shown below	w.		
		-			=		for NI	between \$
inal NI Number will be roun	nded to two place	es to	the ri	ght c	of the decimal. This will be the	he same number as re	ported	to shareholders before any
	ncome Component: Net Income (NI) Compolidated NI results. The 2021 son NI Component: ralues between those show Regression Interpolation I and \$ is y =	ncome Component: Net Income (NI) Component will be olidated NI results. The table shows 2021 NI Results con NI Component: falues between those shown above will be in Regression Interpolation Line for NI between and \$	ncome Component: Net Income (NI) Component will be det olidated NI results. The table shows va 2021 NI Results s on NI Component: falues between those shown above will be interpolation Line for NI between \$\frac{1}{2}\$ and \$\frac{1}{2}\$ is \$y = \frac{1}{2}\$ x - \$\frac{1}{2}\$ in al NI Number will be rounded to two places to	ncome Component: Net Income (NI) Component will be determined olidated NI results. The table shows values 2021 NI Results con NI Component: falues between those shown above will be interpolated. Regression Interpolation Line for NI between \$	ncome Component: Net Income (NI) Component will be determined olidated NI results. The table shows values rou 2021 NI Results s on NI Component: falues between those shown above will be interpolated us Regression Interpolation Line for NI between \$ and and \$ is y = x inal NI Number will be rounded to two places to the right of the component of the places.	ncome Component: Net Income (NI) Component will be determined using the formula in Nolidated NI results. The table shows values rounded. 2021 NI Results c on NI Component: Talues between those shown above will be interpolated using the formula shown below. Regression Interpolation Line for NI between \$ and \$ is y = where X is the NI results formula NI Number will be rounded to two places to the right of the decimal. This will be topproved exceptions.	ncome Component: Net Income (NI) Component will be determined using the formula in Note 1 below using olidated NI results. The table shows values rounded. 2021 NI Results NI Performance 0% 50% 100% 175% con NI Component: (alues between those shown above will be interpolated using the formula shown below: Regression Interpolation Line for NI between \$ and \$ is y = x and line and \$ is y = is y = and \$ is y = and \$ is y = is y = and \$	ncome Component: Net Income (NI) Component will be determined using the formula in Note 1 below using Hold olidated NI results. The table shows values rounded. 2021 NI Results

Operations Component:

The Operations Component (which	aligns with NBU	incentive goals)	for 2021 v	will be determine	d using the	following
formula and table:						

Sum of (Goal Performance Rating x Goal Weight) = Operations Component Factor(1)

2021 Operational Goals

Goals	Goal Performance Rating	Goal Weight
Customer Satisfaction	Cust. Sat. Rating0%100%200%	16.667%
Customer Satisfaction (Staff Interaction)	Cust. Sat. Rating0%100%200%	16.667%
Market Share & Growth (Total New Meter Sets)	Total New Rating Meter Sets0%100%200%	16.667%
Public Safety - Damages (% of calls w/response time less than 45 minutes)	% Call Rsp. Rating0%100%200%	16.667%
Public Safety - Odor Response (% of calls w/response time less than 45 minutes)	% Call Rsp. Rating0%100%200%	16.667%
Employee Safety Each factor weighted 50% DART Rate Days Away Restricted Time	DART Rate Rating 0% 100% 200%	
PMVC No. of Preventable Motor Vehicle Collison (There will be no payout under this metric in the event of an on the job employee fatality due to a preventable safety incident)	PMVC Rating0%100%200%	16.667%
TOTAL		100%

Notes on Operations Goals:

- 1) Goal ratings will be interpolated between amounts shown.
- 2) The Goal Performance Rating for each goal is limited to 200%.
- 3) The Operations Component is limited to 200% and the aggregate performance from this component for use in the EAIP is limited to 175%.

Final Notes on Company Performance Factor and General:

- 1) Final EAIP Participant Awards to participants will be rounded up to the nearest \$1,000.
- 2) Final NI results for 2021 could be adjusted for the impact of certain events as determined by the OECC.

PERFORMANCE SHARE LONG TERM INCENTIVE AGREEMENT

This Agreement is entered into as of February, 2021, between Northwest Natural Holding Company, an Oregon corporation (the "Company"), and ("Recipient").
On February 24, 2021, the Organization and Executive Compensation Committee (the "Committee") of the Company's Board of Directors (the "Board") authorized a performance-based stock award (the "Award") to Recipient pursuant to Section 6 of the Company's Long Term Incentive Plan (the "Plan"). Recipient desires to accept the Award subject to the terms and conditions of this Agreement.
NOW, THEREFORE, the parties agree as follows:
1. <u>Award</u> . Subject to the terms and conditions of this Agreement, the Company shall issue or otherwise deliver to the Recipient the number of shares of Common Stock of the Company (the "Performance Shares") determined under this Agreement based on (a) the performance of the Company during the three-year period from January 1, 2021 to December 31, 2023 (the "Award Period") as described in Section 2 and (b) Recipient's continued employment during the Award Period as described in Section 3. If the Company issues or otherwise delivers Performance Shares to Recipient, the Company shall also pay to Recipient the amount of cash determined under Section 4 (the "Dividend Equivalent Cash Award"). Recipient's "Target Share Amount" for purposes of this Agreement is shares.
2. Performance Conditions.
2.1 Payout Factor. Subject to possible reduction under Section 3, the number of Performance Shares to be issued or otherwise delivered to Recipient shall be determined by multiplying the Payout Factor (as defined below) by the Target Share Amount. The "Payout Factor" shall be equal to (a) the TSR Modifier as determined under Section 2.2, multiplied by (b) the EPS Payout Factor as determined under Section 2.3 below; provided, however, that the Payout Factor shall not be greater than 200% and the Payout Factor shall be 0% if the ROIC Performance Threshold (as defined in Section 2.4 below) is not satisfied. Notwithstanding the foregoing, if a Change in Control (as defined in Section 3.7) occurs before the last day of the Award Period, the Payout Factor shall be 100%.
2.2 TSR Modifier.
(a) The "TSR Modifier" shall be determined under the table below based on the TSR Percentile Rank (as defined below) of the Company:
TSR Percentile Rank TSR Modifier
less than 25% 75%
25% to 75% 100%
more than 75% 125%
(b) To determine the Company's "TSR Percentile Rank," the TSR of the Company and each of the Peer Group Companies (as defined below) shall be calculated, and the Peer Group Companies shall be ranked based on their respective TSR's from lowest to

highest. If the Company's TSR is equal to the TSR of any other Peer Group Company, the Company's TSR Percentile Rank shall be equal to the number of Peer Group Companies with a lower TSR divided by the number that is one less than the total number of Peer Group Companies, with the resulting amount expressed as a percentage and rounded to the nearest tenth of a percentage point. If the Company's TSR is between the TSRs of any two Peer Group Companies, the TSR Percentile Ranks of those two Peer Group Companies shall be determined as set forth in the preceding sentence, and the Company's TSR Percentile Rank shall be interpolated as follows. The excess of the Company's TSR over the TSR of the lower Peer Group Company shall be divided by the excess of the TSR of the higher Peer Group Company over the TSR of the lower Peer Group Company. The resulting fraction shall be multiplied by the difference between the TSR Percentile Ranks of the two Peer Group Companies. The product of that calculation shall be added to the TSR Percentile Rank of the lower Peer Group Company, and the resulting sum (rounded to the nearest tenth of a percentage point) shall be the Company's TSR Percentile Rank. The intent of this definition of TSR Percentile Rank is to produce the same result as calculated using the PERCENTRANK function in Microsoft Excel to determine the rank of the Company's TSR within the array consisting of the TSRs of the Peer Group Companies.

- (c) The "Peer Group Companies" consist of those companies set forth on Exhibit A that continue to have publicly-traded common stock through December 31, 2023.
- (d) The "TSR" for the Company and each Peer Group Company shall be calculated by (1) assuming that \$100 is invested in the common stock of the company at a price equal to the average of the closing market prices of the stock for the period from October 1, 2020 to December 31, 2020, (2) assuming that for each dividend paid on the stock during the Award Period, the amount equal to the dividend paid on the assumed number of shares held is reinvested in additional shares at a price equal to the closing market price of the stock on the ex-dividend date for the dividend, and (3) determining the final dollar value of the total assumed number of shares based on the average of the closing market prices of the stock for the period from October 1, 2023 to December 31, 2023. The "TSR" shall then equal the amount determined by subtracting \$100 from the foregoing final dollar value, dividing the result by 100 and expressing the resulting fraction as a percentage.
- (e) If during the Award Period any Peer Group Company enters into an agreement pursuant to which all or substantially all of the stock or assets of the Peer Group Company will be acquired by a third party (a "Signed Acquisition"), and if the Signed Acquisition is not completed by the end of the Award Period, then that company shall not be a Peer Group Company. If a Signed Acquisition of a Peer Group Company is terminated (other than in connection with the execution of another Signed Acquisition) before the end of the Award Period, then that company shall remain a Peer Group Company, and the TSR for that Peer Group Company shall be calculated as provided in Section 2.2(d), except that if the announcement of the termination of the Signed Acquisition occurs during the last three months of the Award Period, for purposes of determining the final dollar value under clause (3) of Section 2.2(d), the three-month period for which closing market prices are averaged shall be shortened to exclude any trading days preceding the announcement of the termination of the Signed Acquisition.

				
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2.3 EPS Payout Factor.

(a) The "EPS Payout Factor" shall be determined under the table below based on the Cumulative EPS Achievement Percentage (as defined below) achieved by the Company for the Award Period:

Cumulative EPS Achievement Percentage	EPS Payout Factor
less than 93%	0%
93%	40%
100%	100%
105% or more	185%

If the Company's Cumulative EPS Achievement Percentage is between any two data points set forth in the first column of the above table, the EPS Payout Factor shall be interpolated as follows. The excess of the Company's Cumulative EPS Achievement Percentage over the Cumulative EPS Achievement Percentage of the lower data point shall be divided by the excess of the Cumulative EPS Achievement Percentage of the higher data point over the Cumulative EPS Achievement Percentage of the lower data point. The resulting fraction shall be multiplied by the difference between the EPS Payout Factors in the above table corresponding to the two data points. The product of that calculation shall be rounded to the nearest hundredth of a percentage point and then added to the EPS Payout Factor in the above table corresponding to the lower data point, and the resulting sum shall be the EPS Payout Factor.

- (b) The Company's "Cumulative EPS Achievement Percentage" for the Award Period shall equal the Cumulative EPS (as defined below) divided by the Cumulative EPS Target (as defined below), expressed as a percentage and rounded to the nearest tenth of a percentage point.
- (c) The Company's "Cumulative EPS" for the Award Period shall equal the sum of the Company's diluted earnings per share of common stock ("EPS") for each of the three years in the Award Period. Subject to adjustment in accordance with Section 2.5 below, the Company's diluted earnings per share of common stock for any year shall be as set forth in the audited consolidated financial statements of the Company and its subsidiaries for that year. After giving effect to any adjustments required by Section 2.5, the EPS for each year shall be rounded to the nearest penny.
- (d) The Company's "Cumulative EPS Target" for the Award Period shall equal the sum of the EPS targets approved by the Committee for each of the three years in the Award Period. The EPS target for the first year of the Award Period as approved by the Committee is \$_____. Within the first 90 days of the second year of the Award Period, the Committee shall approve the EPS target for that year. Within the first 90 days of the third year of the Award Period, the Committee shall approve the EPS target for that year.

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24	ROIC	Perforn	nance [Threshold.
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(a) Fo	or purposes of this Agreement,	, the "ROIC	Performance	Threshold"	shall be satisfied if the	Company's
Average ROIC (as defined be	low) for the Award Period is	greater than	or equal to	%.		

- (b) The Company's "Average ROIC" for the Award Period shall equal the simple average of the Company's ROIC (as defined below) for each of the three years in the Award Period, rounded to the nearest hundredth of a percentage point. The Company's "ROIC" for any year shall be calculated by dividing the Company's Adjusted Net Income (as defined below) for the year by the Company's Average Long Term Capital (as defined below) for the year, and rounding the result to the nearest hundredth of a percentage point. Subject to adjustment in accordance with Section 2.5 below, the Company's "Adjusted Net Income" for any year shall be equal to the Company's net income for the year, increased by the Company's interest expense, net for the year and reduced by the Company's interest income (including net interest on deferred regulatory accounts) for the year, in each case as set forth in the Company's Annual Report on Form 10-K for that year. "Average Long Term Capital" for any year shall mean the average of the Company's Long Term Capital (as defined below) as of the last day of the year and the Company's Long Term Capital as of the last day of the prior year. Subject to adjustment in accordance with Section 2.5 below, "Long Term Capital" as of any date shall equal the sum of the Company's total shareholders' equity as of that date and the Company's long-term debt (including current maturities) as of that date, in each case as set forth on the audited consolidated balance sheet of the Company as of that date.
- 2.5 EPS and ROIC Adjustments. The Committee may, at any time, approve adjustments to the calculation of Cumulative EPS and/or Average ROIC to take into account such unanticipated circumstances or significant, non-recurring or unplanned events as the Committee may determine in its sole discretion, and such adjustments may increase or decrease Cumulative EPS and/or Average ROIC. Possible circumstances that may be the basis for adjustments shall include, but not be limited to, any change in applicable accounting rules or principles; any gain or loss on the disposition of a business; impairment of assets; dilution caused by Board approved business acquisition; tax changes and tax impacts of other changes; changes in applicable laws and regulations; changes in rate case timing; changes in the Company's structure; and any other circumstances outside of management's control.

3. Employment Condition.

- 3.1 Except as provided in Sections 3.2, 3.3 or 7.2, in order to receive a payout of Performance Shares, Recipient must be employed by the Company or any parent or subsidiary of the Company (the "Employer") on the last day of the Award Period.
- 3.2 If Recipient's employment by the Employer is terminated at any time prior to the end of the Award Period because of death, physical disability (within the meaning of Section 22(e)(3) of the Internal Revenue Code of 1986 (the "Code")), or Retirement (unless such Retirement results from a termination of Recipient's employment by the Employer for Cause), Recipient shall be entitled to receive a pro-rated award. The number of Performance Shares to be issued or otherwise delivered as a pro-rated award under this Section 3.2 shall be determined

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by multiplying the number of Performance Shares determined under Section 2 by a fraction, the numerator of which is the number of days Recipient was employed by Employer during the Award Period and the denominator of which is the number of days in the Award Period. If Recipient's employment by the Employer terminates because of Retirement, death or physical disability and a Change in Control subsequently occurs before the end of the Award Period, the number of Performance Shares determined under Section 3.3 shall immediately be paid to Recipient. If a Change in Control occurs and Recipient's employment by the Employer subsequently terminates before the end of the Award Period because of Retirement, death or physical disability, the number of Performance Shares determined under Section 3.3 shall immediately be paid to Recipient.

3.3 CIC Acceleration.

(a) If Recipient is a party to a Change in Control Severance Agreement with the Company or a parent or subsidiary of the Company, Recipient shall immediately be paid a pro-rated award if Recipient becomes entitled to a Change in Control Severance Benefit (as defined below). The number of Performance Shares to be issued or otherwise delivered as a pro-rated award under this Section 3.3 shall be determined by multiplying the Target Share Amount by a fraction, the numerator of which is the number of days Recipient was employed by the Employer during the Award Period and the denominator of which is the number of days in the Award Period. A "Change in Control Severance Benefit" means the severance benefit provided for in Recipient's Change in Control Severance Agreement with the Company or a parent or subsidiary of the Company; provided, however, that such severance benefit is a "Change in Control Severance Benefit" for purposes of this Agreement only if, under the terms of Recipient's Change in Control Severance Agreement, Recipient becomes entitled to the severance benefit (i) after a Change in Control of the Company has occurred, (ii) because Recipient's employment with the Employer has been terminated by Recipient for good reason in accordance with the terms and conditions of the Change in Control Severance Agreement or by the Employer other than for cause, and (iii) because Recipient has satisfied any other conditions or requirements specified in the Change in Control Severance Agreement and necessary for Recipient to become entitled to receive the severance benefit. For purposes of this Section 3.3(a), the terms "change in control," "good reason," "cause" and "disability" shall have the meanings set forth in Recipient's Change in Control Severance Agreement.

(b) If Recipient is <u>not</u> a party to a Change in Control Severance Agreement with the Company or a parent or subsidiary of the Company, Recipient shall immediately be paid a pro-rated award in the amount stated in Section 3.3(a) if a Change in Control (as defined in Section 3.7 below) occurs and at any time after the earlier of Shareholder Approval (as defined in Section 3.8 below), if any, or the Change in Control and on or before the second anniversary of the Change in Control, (i) Recipient's employment is terminated by the Employer (or its successor) without Cause (as defined in Section 3.6 below), or (b) Recipient's employment is terminated by Recipient for Good Reason (as defined in Section 3.9 below).

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- 3.4 If Recipient's employment by the Employer is terminated at any time prior to the end of the Award Period and Section 3.2, 3.3 or 7.2 does not apply to such termination, Recipient shall not be entitled to receive any Performance Shares.
- 3.5 "Retirement" shall mean termination of employment (a) on or after the first anniversary of the date of this Agreement, and (b) after Recipient is (1) age 62 with at least five years of service as an employee of the Company or a parent or subsidiary of the Company, or (2) age 60 with age plus years of service (including fractions) as an employee of the Company or a parent or subsidiary of the Company totaling at least 70.
- 3.6 "Cause" shall mean (a) the willful and continued failure by Recipient to perform substantially Recipient's assigned duties with the Employer (other than any such failure resulting from incapacity due to physical or mental illness) after a demand for substantial performance is delivered to Recipient by the Employer which specifically identifies the manner in which Recipient has not substantially performed such duties, (b) willful commission by Recipient of an act of fraud or dishonesty resulting in economic or financial injury to the Company or Employer, (c) willful misconduct by Recipient that substantially impairs the business or reputation of the Company or Employer, or (d) willful gross negligence by Recipient in the performance of his or her duties.
- 3.7 For purposes of this Agreement, a "Change in Control" of the Company shall mean the occurrence of any of the following events:

(a) The consummation of:

- (1) any consolidation, merger or plan of share exchange involving the Company (a "Merger") as a result of which the holders of outstanding securities of the Company ordinarily having the right to vote for the election of directors ("Voting Securities") immediately prior to the Merger do not continue to hold at least 50% of the combined voting power of the outstanding Voting Securities of the surviving corporation or a parent corporation of the surviving corporation immediately after the Merger, disregarding any Voting Securities issued to or retained by such holders in respect of securities of any other party to the Merger; or
- (2) any consolidation, merger, plan of share exchange or other transaction involving Northwest Natural Gas Company ("NW Natural") as a result of which the Company does not continue to hold, directly or indirectly, at least 50% of the outstanding securities of NW Natural ordinarily having the right to vote for the election of directors; or
- (3) any sale, lease, exchange or other transfer (in one transaction or a series of related transactions) of all, or substantially all, the assets of the Company or NW Natural;
- (b) At any time during a period of two consecutive years, individuals who at the beginning of such period constituted the Board ("Incumbent Directors") shall cease for any reason to constitute at least a majority thereof; provided, however, that the term "Incumbent Director" shall also include each new director elected during such two-year period

whose nomination or election was approved by two-thirds of the Incumbent Directors then in office; or

- (c) Any person (as such term is used in Section 14(d) of the Securities Exchange Act of 1934, other than the Company or any employee benefit plan sponsored by the Company or NW Natural) shall, as a result of a tender or exchange offer, open market purchases or privately negotiated purchases from anyone other than the Company, have become the beneficial owner (within the meaning of Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of Voting Securities representing twenty percent (20%) or more of the combined voting power of the then outstanding Voting Securities.
- 3.8 For purposes of this Agreement, "Shareholder Approval" shall be deemed to have occurred if the shareholders of the Company approve an agreement entered into by the Company, the consummation of which would result in the occurrence of a Change in Control.
- 3.9 For purposes of this Agreement, "Good Reason" shall mean the occurrence after Shareholder Approval, if applicable, or the Change in Control, of any of the following circumstances, but only if (x) Recipient gives notice to Employer of Recipient's intent to terminate employment for Good Reason within 30 days after the later of (1) notice to Recipient of such circumstances, or (2) the Change in Control, and (y) such circumstances are not fully corrected by the Employer within 90 days after Recipient's notice:
- (a) the assignment to Recipient of a different title, job or responsibilities that results in a decrease in the level of Recipient's responsibility; provided that Good Reason shall not exist if Recipient continues to have the same or a greater general level of responsibility for the former Employer operations after the Change in Control as Recipient had prior to the Change in Control even though such responsibilities have necessarily changed due to the former Employer operations becoming a subsidiary or division of the surviving company;
- (b) a reduction by the Employer in Recipient's base salary as in effect immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control;
- (c) the failure by Employer to continue in effect any employee benefit or incentive plan in which Recipient is participating immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control (or plans providing Recipient with at least substantially similar benefits) other than as a result of the normal expiration of any such plan in accordance with its terms as in effect immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control, or the taking of any action, or the failure to act, by Employer which would adversely affect Recipient's continued participation in any of such plans on at least as favorable a basis to Recipient as is the case immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control or which would materially reduce Recipient's benefits in the future under any of such plans or deprive Recipient of any material benefit enjoyed by Recipient immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control;
- (d) the failure by the Employer to provide and credit Recipient with the number of paid vacation days to which Recipient is then entitled in accordance with the

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Employer's normal vacation policy as in effect immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control; or

- (e) the Employer's requiring Recipient to be based more than 30 miles from where Recipient's office is located immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control except for required travel on the Employer's business to an extent substantially consistent with the business travel obligations which Recipient undertook on behalf of the Employer prior to the earlier of Shareholder Approval, if applicable, or the Change in Control.
- 4. <u>Dividend Equivalent Cash Award</u>. The amount of the Dividend Equivalent Cash Award shall be determined by multiplying the number of Performance Shares deliverable to Recipient as determined under Sections 2 and 3 by the total amount of dividends paid per share of the Company's Common Stock for which the dividend record date occurred after the beginning of the Award Period and before the date of delivery of the Performance Shares.
- 5. Certification and Payment. At the regularly scheduled meeting of the Committee held in February of the year immediately following the final year of the Award Period (the "Certification Meeting"), the Committee shall review the Company's results for the Award Period. Prior to the Certification Meeting, the Company shall calculate the number of Performance Shares deliverable and the amount of the Dividend Equivalent Cash Award payable to Recipient, and shall submit these calculations to the Committee. At or prior to the Certification Meeting, the Committee shall certify in writing (which may consist of approved minutes of the Certification Meeting) the number of Performance Shares deliverable to Recipient and the amount of the Dividend Equivalent Cash Award payable to Recipient. Subject to applicable tax withholding, the amounts so certified shall be delivered or paid (as applicable) on a date (the "Payment Date") that is the later of March 1, 2024 or five business days following the Certification Meeting, and no amounts shall be delivered or paid prior to certification. No fractional shares shall be delivered and the number of Performance Shares deliverable shall be rounded to the nearest whole share. Notwithstanding the foregoing, if Recipient shall have made a valid election to defer receipt of Performance Shares or the Dividend Equivalent Cash Award pursuant to the terms of Northwest Natural's Deferred Compensation Plan for Directors and Executives (the "DCP"), payment of the award shall be made in accordance with that election.
- 6. Tax Withholding. Recipient acknowledges that, on the Payment Date when the Performance Shares are issued or otherwise delivered to Recipient, the Value (as defined below) on that date of the Performance Shares (as well as the amount of the Dividend Equivalent Cash Award) will be treated as ordinary compensation income for federal and state income and FICA tax purposes, and that the Employer will be required to withhold taxes on these income amounts. To satisfy the required withholding amount, the Employer shall first withhold all or part of the Dividend Equivalent Cash Award, and if that is insufficient, the Employer shall withhold the number of Performance Shares having a Value equal to the remaining withholding amount. For purposes of this Section 6, the "Value" of a Performance Share shall be equal to the closing market price for Company Common Stock on the last trading day preceding the Payment Date. Notwithstanding the foregoing, Recipient may elect not to have Performance Shares withheld to cover taxes by giving notice to the Company in writing prior to the Payment Date, in which case

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the Performance Shares shall be issued or acquired in the Recipient's name on the Payment Date thereby triggering the tax consequences, but the Company shall retain the certificate for the Performance Shares as security until Recipient shall have paid to the Company in cash any required tax withholding not covered by withholding of the Dividend Equivalent Cash Award.

- 7. Sale of the Company. If there shall occur before the Payment Date a merger, consolidation or plan of exchange involving the Company pursuant to which the outstanding shares of Common Stock of the Company are converted into cash or other stock, securities or property, or a sale, lease, exchange or other transfer (in one transaction or a series of related transactions) of all, or substantially all, the assets of the Company (either, a "Company Sale"), then either:
- 7.1 the unvested Performance Shares shall be converted into restricted stock units for stock of the surviving or acquiring corporation in the applicable transaction, with the amount and type of shares subject thereto to be conclusively determined by the Committee, taking into account the relative values of the companies involved in the applicable transaction and the exchange rate, if any, used in determining shares of the surviving corporation to be held by the former holders of the Company's Common Stock following the applicable transaction, and disregarding fractional shares; or
- 7.2 a pro-rated number of Performance Shares and the related dividend equivalent cash payment shall be delivered simultaneously with the closing of the applicable transaction such that Recipient will participate as a shareholder in receiving proceeds from such transaction with respect to those shares. The number of Performance Shares to be delivered as a pro-rated award under this Section 7.2 shall be determined by multiplying the Target Share Amount by a fraction, the numerator of which is the number of days of the Award Period elapsed prior to the closing of the transaction and the denominator of which is the number of days in the Award Period.
- 8. Changes in Capital Structure. If the outstanding Common Stock of the Company is hereafter increased or changed into or exchanged for a different number or kind of shares or other securities of the Company by reason of any stock split, combination of shares or dividend payable in shares, recapitalization or reclassification, appropriate adjustment shall be made by the Committee in the number and kind of shares subject to this Agreement so that the Recipient's proportionate interest before and after the occurrence of the event is maintained.

9. Recoupment On Misconduct.

9.1 If at any time before a Change in Control and within three years after the Payment Date, the Committee determines that Recipient engaged in any Misconduct (as defined below) during the Award Period that contributed to an obligation to restate the Company's financial statements for any quarter or year in the Award Period or that otherwise has had (or will have when publicly disclosed) an adverse impact on the Company's common stock price, Recipient shall repay to the Company the Excess LTIP Compensation (as defined below). The term "Excess LTIP Compensation" means the excess of (a) the number of Performance Shares and the amount of the Dividend Equivalent Cash Award as originally calculated and certified under Section 5 of this Agreement, over (b) the number of Performance Shares and the amount

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of the Dividend Equivalent Cash Award as recalculated (1) for the TSR Modifier, assuming that the average of the closing market prices of the Company's common stock for the period from October 1, 2023 to December 31, 2023 was an amount determined appropriate by the Committee in its discretion to reflect what the Company's common stock price would have been if the restatement had occurred or other Misconduct had been disclosed prior to October 1, 2023, and (2) for the EPS Payout Factor and the ROIC Performance Threshold, based on the Company's financial statements for all years of the Award Period as restated. The Committee may, in its sole discretion, reduce the amount of Excess LTIP Compensation to be repaid by Recipient to take into account the tax consequences of such repayment or any other factors. If any Performance Shares included in the Excess LTIP Compensation are sold by Recipient prior to the Company's demand for repayment (including any shares withheld for taxes under Section 6 of this Agreement), Recipient shall repay to the Company 100% of the proceeds of such sale or sales. The return of Excess LTIP Compensation is in addition to and separate from any other relief available to the Company due to Recipient's Misconduct.

- 9.2 "Misconduct" shall mean (a) willful commission by Recipient of an act of fraud or dishonesty resulting in economic or financial injury to the Company, (b) willful misconduct by Recipient that substantially impairs the Company's business or reputation, or (c) willful gross negligence by Recipient in the performance of his or her duties.
- 9.3 If any portion of the Performance Shares or the Dividend Equivalent Cash Award was deferred under the DCP, the Excess LTIP Compensation shall first be recovered by canceling all or a portion of the amounts so deferred under the DCP and any dividends or other earnings credited under the DCP with respect to such cancelled amounts. The Company may seek direct repayment from Recipient of any Excess LTIP Compensation not so recovered and may, to the extent permitted by applicable law, offset such Excess LTIP Compensation against any compensation or other amounts owed by the Company to Recipient. In particular, Excess LTIP Compensation may be recovered by offset against the after-tax proceeds of deferred compensation payouts under the DCP, Northwest Natural's Executive Supplemental Retirement Income Plan or Northwest Natural's Supplemental Executive Retirement Plan at the times such deferred compensation payouts occur under the terms of those plans. Excess LTIP Compensation that remains unpaid for more than 60 days after demand by the Company shall accrue interest at the rate used from time to time for crediting interest under the DCP.
- 10. Approvals. The obligations of the Company under this Agreement are subject to the approval of state and federal authorities or agencies with jurisdiction in the matter. The Company will use its best efforts to take steps required by state or federal law or applicable regulations, including rules and regulations of the Securities and Exchange Commission and any stock exchange on which the Company's shares may then be listed, in connection with the award under this Agreement. The foregoing notwithstanding, the Company shall not be obligated to issue or deliver Common Stock under this Agreement if such issuance or delivery would violate applicable state or federal law.
- 11. No Right to Employment. Nothing contained in this Agreement shall confer upon Recipient any right to be employed by the Employer or to continue to provide services to the

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Employer or to interfere in any way with the right of the Employer to terminate Recipient's services at any time for any reason, with or without cause.

12. Miscellaneous.

- 12.1 Entire Agreement; Amendment. This Agreement constitutes the entire agreement of the parties with regard to the subjects hereof and may be amended only by written agreement between the Company and Recipient.
- 12.2 <u>Notices</u>. Any notice required or permitted under this Agreement shall be in writing and shall be deemed sufficient when delivered personally to the party to whom it is addressed or when deposited into the United States Mail as registered or certified mail, return receipt requested, postage prepaid, addressed to the Company, Attention: Corporate Secretary, at its principal executive offices, or to Employer, Attention: Corporate Secretary, at its principal executive offices, or to Recipient at the address of Recipient in the Company's records, or at such other address as such party may designate by ten (10) days' advance written notice to the other party.
- 12.3 <u>Assignment; Rights and Benefits</u>. Recipient shall not assign this Agreement or any rights hereunder to any other party or parties without the prior written consent of the Company. The rights and benefits of this Agreement shall inure to the benefit of and be enforceable by the Company's successors and assigns and, subject to the foregoing restriction on assignment, be binding upon Recipient's heirs, executors, administrators, successors and assigns.
- 12.4 <u>Further Action</u>. The parties agree to execute such further instruments and to take such further action as may reasonably be necessary to carry out the intent of this Agreement.
- 12.5 <u>Applicable Law: Attorneys' Fees</u>. The terms and conditions of this Agreement shall be governed by the laws of the State of Oregon. In the event either party institutes litigation hereunder, the prevailing party shall be entitled to reasonable attorneys' fees to be set by the trial court and, upon any appeal, the appellate court.
- 12.6 <u>Counterparts</u>. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original.

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	NORTHWEST NA	TURAL HOLDING COMPAN	٧Y	
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EXHIBIT A Peer Group Companies

Atmos Energy Corporation
ONE Gas, Inc.
South Jersey Industries, Inc.
Spire Inc.
Southwest Gas Holdings, Inc.
NiSource Inc.
New Jersey Resources Corporation
Avista Corporation
Black Hills Corporation
MGE Energy, Inc.
NorthWestern Corporation
Unitil Corporation

RESTRICTED STOCK UNIT AWARD AGREEMENT

This Agreement is entered into as of February, 2021, between Northwest Natural Holding Company, an Oregon corporation (the "Company"), and ("Recipient").
On February 24, 2021, the Organization and Executive Compensation Committee (the "Committee") of the Company's Board of Directors (the "Board") awarded restricted stock units to Recipient pursuant to Section 6 of the Company's Long Term Incentive Plan (the "Plan"). Recipient desires to accept the award subject to the terms and conditions of this Agreement.
NOW, THEREFORE, the parties agree as follows:
1. Grant of Restricted Stock Units; Dividend Equivalents. Subject to the terms and conditions of this Agreement, the Company hereby grants to the Recipient restricted stock units (the "RSUs"). The grant of RSUs obligates the Company, upon vesting in accordance with this Agreement, to deliver to the Recipient one share of Common Stock of the Company (a "Share") for each RSU. Upon vesting of each RSU, the Company also agrees to make a dividend equivalent cash payment with respect to each vested RSU in an amount equal to the total amount of dividends paid per share of Company Common Stock for which the dividend record dates occurred after the date of this Agreement and before the date of delivery of the underlying Shares. The RSUs are subject to forfeiture as set forth in Sections 2.1 and 2.10 below.
2. <u>Vesting: Forfeiture Restriction</u> .
2.1 <u>Vesting Schedule</u> .
(a) All of the RSUs shall initially be unvested. Subject to Sections 2.3, 2.4, 2.5, 2.10 and 5.2, the RSUs shall vest as follows:
(1) one-fourth of the RSUs shall vest on March 1, 2022 if the Performance Threshold (as defined in Section 2.2 below) is satisfied for 2021;
(2) an additional one-fourth of the RSUs shall vest on March 1, 2023 if the Performance Threshold is satisfied for 2022;
(3) an additional one-fourth of the RSUs shall vest on March 1, 2024 if the Performance Threshold is satisfied for 2023; and
(4) the final one-fourth of the RSUs shall vest on March 1, 2025 if the Performance Threshold is satisfied for 2024.
(b) If the Performance Threshold is not satisfied for any year set forth in (1), (2), (3) or (4) above, the RSUs that would have vested if the Performance Threshold had been satisfied for that year (the "Performance Year") shall be forfeited to the Company effective as of the last day of the Performance Year. For example, if the Performance Threshold is not

satisfied for 2021, all RSUs that were scheduled to vest on March 1, 2022 shall be forfeited effective as of December 31, 2021.

(c) If a Change in Control (as defined in Section 2.6 below) occurs, the Performance Threshold shall be deemed to be satisfied for all Performance Years that were not completed prior to the Change in Control, with the effect that the RSUs outstanding at the time of the Change of Control shall vest upon completion of the applicable time periods in Section 2.1(a).

2.2 Performance Threshold.

- (a) For purposes of this Agreement, the "Performance Threshold" for any year shall be satisfied if the ROE (as defined below) for that year is greater than the 5 Yr Avg Cost of LT Debt (as defined below) for that year.
- (b) The "ROE" for any year shall be calculated by dividing the Company's Adjusted Net Income (as defined below) for the year by the Average Equity (as defined below) for the year. Subject to adjustment in accordance with Section 2.2(c) below, the Company's "Adjusted Net Income" for any year shall be equal to the Company's net income attributable to common shareholders for the year, as set forth in the audited consolidated statement of income of the Company and its subsidiaries for the year. Subject to adjustment in accordance with Section 2.2(c) below, "Average Equity" for any year shall mean the average of the Company's total common stock equity as of the last day of the prior year, in each case as set forth on the audited consolidated balance sheet of the Company and its subsidiaries as of the applicable date.
- (c) The Committee may, at any time, approve adjustments to the calculation of ROE to take into account such unanticipated circumstances or significant, non-recurring or unplanned events as the Committee may determine in its sole discretion, and such adjustments may increase or decrease ROE. Possible circumstances that may be the basis for adjustments shall include, but not be limited to, any change in applicable accounting rules or principles; any gain or loss on the disposition of a business; impairment of assets; dilution caused by Board approved business acquisition; tax changes and tax impacts of other changes; changes in applicable laws and regulations; changes in rate case timing; changes in the Company's structure; and any other circumstances outside of management's control.
- (d) The "5 Yr Avg Cost of LT Debt" for any year shall mean the average of five numbers consisting of the Avg Cost of LT Debt (as defined below) for that year and for each of the four preceding years. The "Avg Cost of LT Debt" for any year shall be equal to the sum of the Weighted Costs (as defined below) calculated for each series or tranche of long-term debt of the Company outstanding on the last day of the year. The "Weighted Cost" for a series or tranche of long-term debt as of any date shall be calculated by multiplying the Effective Interest Rate (as defined below) on the debt as of that date by the outstanding principal balance of the debt on that date, and then dividing the resulting amount by the Company's total outstanding principal balance of long-term debt as of that date. The "Effective Interest Rate" for a series or tranche of long-term debt as of any date shall be the yield calculated based on the

2						

settlement date for the original issuance of the series or tranche, the maturity date of the series or tranche, the stated annual interest rate of the series or tranche in effect on that date, the number of interest payments per year under the terms of the series or tranche, the initial borrowing of an amount equal to the principal balance net of Debt Issuance Costs (as defined below) for the series or tranche, and the repayment of principal at maturity or otherwise according to the terms of the series or tranche. The "Debt Issuance Costs" for a series or tranche of long-term debt shall include the fees, commissions and expenses of issuance of such debt, any other purchase discount from the face amount of such debt, and any premiums, write-offs of unamortized debt issuance costs and other costs incurred in connection with retiring debt refinanced with the proceeds of such debt, all as reflected in the Company's accounting records. For purposes of this Section 2.2(d), the Company's long term debt and the interest rates and outstanding principal balances of the outstanding series or tranches of long-term debt as of any date shall be those amounts as set forth in the audited consolidated financial statements of the Company and its subsidiaries for the year ending on that date, and shall in all cases include the current portion of any long-term debt and exclude borrowings under a revolving credit facility. For the avoidance of doubt, the Effective Interest Rate for purposes of this Agreement of each series of fixed-rate long-term debt outstanding as of the date of this Agreement is set forth on Exhibit A hereto.

2.3 Effect of Retirement, Death, or Disability.

- (a) If Recipient's employment by the Company or any parent or subsidiary of the Company (the "Employer") terminates because of Retirement (as defined below), death or physical disability (within the meaning of Section 22(e) (3) of the Code and a Change in Control has not previously occurred, all outstanding RSUs shall remain outstanding and subject to potential future vesting upon satisfaction of the Performance Threshold for the applicable years.
- (b) If Recipient's employment by the Employer terminates because of Retirement, death or physical disability and a Change in Control subsequently occurs, all outstanding RSUs shall immediately vest. If a Change in Control occurs and Recipient's employment by the Employer subsequently terminates because of Retirement, death or physical disability, all outstanding RSUs shall immediately vest.
- (c) The term "Retirement" means termination of employment (1) on or after the first anniversary of the date of this Agreement, and (2) after the Recipient is (i) age 62 with at least five years of service as an employee of the Company or a parent or subsidiary of the Company, or (ii) age 55 with age plus years of service (including fractions) as an employee of the Company or a parent or subsidiary of the Company totaling at least 70; provided, however, that a termination of Recipient's employment by the Employer for Cause (as defined in Section 2.8 below) shall not constitute a Retirement.
- 2.4 <u>CIC Acceleration if Party to a Severance Agreement</u>. If Recipient is a party to a Change in Control Severance Agreement with the Company or a parent or subsidiary of the Company, all outstanding RSUs shall immediately vest if Recipient becomes entitled to a Change in Control Severance Benefit (as defined below). A "Change in Control Severance Benefit" means the severance benefit provided for in Recipient's Change in Control Severance

9				

Agreement with the Company or a parent or subsidiary of the Company; provided, however, that such severance benefit is a "Change in Control Severance Benefit" for purposes of this Agreement only if, under the terms of Recipient's Change in Control Severance Agreement, Recipient becomes entitled to the severance benefit (a) after a change in control of the Company has occurred, (b) because Recipient's employment with the Employer has been terminated by Recipient for good reason in accordance with the terms and conditions of the Change in Control Severance Agreement or by the Employer other than for cause, and (c) because Recipient has satisfied any other conditions or requirements specified in the Change in Control Severance Agreement and necessary for Recipient to become entitled to receive the severance benefit. For purposes of this Section 2.4, the terms "change in control," "good reason," "cause" and "disability" shall have the meanings set forth in Recipient's Change in Control Severance Agreement.

- 2.5 <u>CIC Acceleration if Not a Party to a Severance Agreement</u>. If Recipient is <u>not</u> a party to a Change in Control Severance Agreement with the Company or a parent or subsidiary of the Company, all outstanding RSUs shall immediately vest if a Change in Control (as defined in Section 2.6 below) occurs and at any time after the earlier of Shareholder Approval (as defined in Section 2.7 below), if any, or the Change in Control and on or before the second anniversary of the Change in Control, (a) Recipient's employment is terminated by the Employer (or its successor) without Cause (as defined in Section 2.8 below), or (b) Recipient's employment is terminated by Recipient for Good Reason (as defined in Section 2.9 below).
- 2.6 <u>Change in Control</u>. For purposes of this Agreement, a "Change in Control" of the Company shall mean the occurrence of any of the following events:

(a) The consummation of:

- (1) any consolidation, merger or plan of share exchange involving the Company (a "Merger") as a result of which the holders of outstanding securities of the Company ordinarily having the right to vote for the election of directors ("Voting Securities") immediately prior to the Merger do not continue to hold at least 50% of the combined voting power of the outstanding Voting Securities of the surviving corporation or a parent corporation of the surviving corporation immediately after the Merger, disregarding any Voting Securities issued to or retained by such holders in respect of securities of any other party to the Merger; or
- (2) any consolidation, merger, plan of share exchange or other transaction involving Northwest Natural Gas Company ("NW Natural") as a result of which the Company does not continue to hold, directly or indirectly, at least 50% of the outstanding securities of NW Natural ordinarily having the right to vote for the election of directors; or
- (3) any sale, lease, exchange or other transfer (in one transaction or a series of related transactions) of all, or substantially all, the assets of the Company or NW Natural;

4										

- (b) At any time during a period of two consecutive years, individuals who at the beginning of such period constituted the Board ("Incumbent Directors") shall cease for any reason to constitute at least a majority thereof; provided, however, that the term "Incumbent Director" shall also include each new director elected during such two-year period whose nomination or election was approved by two-thirds of the Incumbent Directors then in office; or
- (c) Any person (as such term is used in Section 14(d) of the Securities Exchange Act of 1934, other than the Company or any employee benefit plan sponsored by the Company or NW Natural) shall, as a result of a tender or exchange offer, open market purchases or privately negotiated purchases from anyone other than the Company, have become the beneficial owner (within the meaning of Rule 13d-3 under the Securities Exchange Act of 1934), directly or indirectly, of Voting Securities representing twenty percent (20%) or more of the combined voting power of the then outstanding Voting Securities.
- 2.7 <u>Shareholder Approval</u>. For purposes of this Agreement, "Shareholder Approval" shall be deemed to have occurred if the shareholders of the Company approve an agreement entered into by the Company, the consummation of which would result in the occurrence of a Change in Control.
- 2.8 <u>Cause</u>. For purposes of this Agreement, "Cause" shall mean (a) the willful and continued failure by Recipient to perform substantially Recipient's assigned duties with the Employer (other than any such failure resulting from incapacity due to physical or mental illness) after a demand for substantial performance is delivered to Recipient by the Employer which specifically identifies the manner in which Recipient has not substantially performed such duties, (b) willful commission by Recipient of an act of fraud or dishonesty resulting in economic or financial injury to the Company or Employer, (c) willful misconduct by Recipient that substantially impairs the business or reputation of the Company or Employer, or (d) willful gross negligence by Recipient in the performance of his or her duties.
- 2.9 <u>Good Reason</u>. For purposes of this Agreement, "Good Reason" shall mean the occurrence after Shareholder Approval, if applicable, or the Change in Control, of any of the following circumstances, but only if (x) Recipient gives notice to Employer of Recipient's intent to terminate employment for Good Reason within 30 days after the later of (1) notice to Recipient of such circumstances, or (2) the Change in Control, and (y) such circumstances are not fully corrected by the Employer within 90 days after Recipient's notice:
- (a) the assignment to Recipient of a different title, job or responsibilities that results in a decrease in the level of Recipient's responsibility; provided that Good Reason shall not exist if Recipient continues to have the same or a greater general level of responsibility for the former Employer operations after the Change in Control as Recipient had prior to the Change in Control even though such responsibilities have necessarily changed due to the former Employer operations becoming a subsidiary or division of the surviving company;
- (b) a reduction by the Employer in Recipient's base salary as in effect immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control;

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- (c) the failure by Employer to continue in effect any employee benefit or incentive plan in which Recipient is participating immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control (or plans providing Recipient with at least substantially similar benefits) other than as a result of the normal expiration of any such plan in accordance with its terms as in effect immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control, or the taking of any action, or the failure to act, by Employer which would adversely affect Recipient's continued participation in any of such plans on at least as favorable a basis to Recipient as is the case immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control or which would materially reduce Recipient's benefits in the future under any of such plans or deprive Recipient of any material benefit enjoyed by Recipient immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control;
- (d) the failure by the Employer to provide and credit Recipient with the number of paid vacation days to which Recipient is then entitled in accordance with the Employer's normal vacation policy as in effect immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control; or
- (e) the Employer's requiring Recipient to be based more than 30 miles from where Recipient's office is located immediately prior to the earlier of Shareholder Approval, if applicable, or the Change in Control except for required travel on the Employer's business to an extent substantially consistent with the business travel obligations which Recipient undertook on behalf of the Employer prior to the earlier of Shareholder Approval, if applicable, or the Change in Control.
- 2.10 Forfeiture; Possible Restoration. If Recipient ceases to be employed by the Employer for any reason or for no reason, with or without cause, other than because of Retirement, death or physical disability (within the meaning of Section 22(e)(3) of the Code), any RSUs that did not vest pursuant to this Section 2 or Section 5.2 at or prior to the time of such termination of employment shall be forfeited to the Company; provided, however, that if Recipient's employment is terminated by the Employer without Cause or by the Recipient for Good Reason after Shareholder Approval but before a Change in Control, any RSUs that are forfeited under this sentence shall be restored to the Recipient and vested if a Change in Control subsequently occurs within two years.
- 3. <u>Certification and Delivery</u>. As soon as practicable following the completion of each Performance Year, the Company shall calculate the ROE and the 5 Yr Avg Cost of LT Debt for that Performance Year, and shall submit those calculations to the Committee. At or prior to the regularly scheduled meeting of the Committee held in February of the year immediately following each Performance Year (each, a "Certification Meeting"), the Committee shall certify in writing (which may consist of approved minutes of the meeting) whether or not the Performance Threshold was satisfied for that Performance Year. Unless otherwise required under this Agreement as a result of the occurrence of a Change in Control, no amounts shall be delivered or paid unless the Committee certifies that the Performance Threshold has been satisfied for the applicable Performance Year. Subject to applicable tax withholding, on a date (a

6			

"Payment Date") that is on or as soon as practicable after the date any of the RSUs become vested or, if later, five business days following the Certification Meeting relating to those RSUs, the Company shall deliver to Recipient (a) the number of Shares underlying the RSUs that vested (rounded down to the nearest whole share), and (b) the dividend equivalent cash payment determined under Section 1 with respect to the number of Shares that are delivered; provided, however, that if accelerated vesting of the RSUs occurs pursuant to Section 2.3(b) as a result of Recipient's Retirement after a Change in Control has previously occurred, the Payment Date shall be delayed until a date that is on or as soon as practicable after the earlier of (x) the date the RSUs would have vested under Section 2.1, or (y) the date that is six months after Recipient's separation from service (within the meaning of Section 409A of the Internal Revenue Code). Notwithstanding the foregoing provisions of this Section 3, if Recipient shall have made a valid election to defer receipt of the Shares and dividend equivalent cash payment pursuant to the terms of Northwest Natural's Deferred Compensation Plan for Directors and Executives (the "DCP"), payment of RSUs that vest shall be made in accordance with that election.

4. Tax Withholding.

- 4.1 Recipient acknowledges that, on any Payment Date when Shares are delivered to Recipient, the Value (as defined below) on that date of the Shares so delivered (as well as the amount of the related dividend equivalent cash payment) will be treated as ordinary compensation income for federal and state income and FICA tax purposes, and that the Employer will be required to withhold taxes on these income amounts. To satisfy the required withholding amount, the Employer shall first withhold all or part of the dividend equivalent cash payment, and if that is insufficient, the Employer shall withhold the number of Shares having a Value equal to the remaining withholding amount. For purposes of this Section 4, the "Value" of a Share shall be equal to the closing market price for Company Common Stock on the last trading day preceding the Payment Date.
- 4.2 Recipient acknowledges that under current tax law, the Employer is required to withhold FICA taxes with respect to the RSUs at the earlier of (a) the issuance of shares underlying the RSUs or (b) the date after a Change in Control on which Recipient becomes eligible for Retirement (or the date of the Change in Control if Recipient is eligible for Retirement at the time of the Change in Control). To satisfy the required minimum FICA withholding in the event that subsection (b) applies, Recipient shall, immediately upon notification of the amount due, pay to the Company in cash or by check amounts necessary to satisfy applicable FICA withholding requirements. If Recipient fails to pay the amount demanded, the Company may withhold that amount from other amounts payable to Recipient, including salary, subject to applicable law.
- 4.3 Notwithstanding the foregoing, Recipient may elect not to have Shares withheld to cover taxes by giving notice to the Company in writing prior to the Payment Date, in which case the Shares shall be issued or acquired in Recipient's name on the Payment Date thereby triggering the tax consequences, but the Company shall retain the certificate for the Shares as security until Recipient shall have paid to the Company in cash any required tax withholding not covered by withholding of the dividend equivalent cash payment.

7			

- 5. <u>Sale of the Company</u>. If there shall occur a merger, consolidation or plan of exchange involving the Company pursuant to which the outstanding shares of Common Stock of the Company are converted into cash or other stock, securities or property, or a sale, lease, exchange or other transfer (in one transaction or a series of related transactions) of all, or substantially all, the assets of the Company, then either:
- 5.1 the unvested RSUs shall be converted into restricted stock units for stock of the surviving or acquiring corporation in the applicable transaction, with the amount and type of shares subject thereto to be conclusively determined by the Committee, taking into account the relative values of the companies involved in the applicable transaction and the exchange rate, if any, used in determining shares of the surviving corporation to be held by the former holders of the Company's Common Stock following the applicable transaction, and disregarding fractional shares; or
- 5.2 all of the unvested RSUs shall immediately vest and the underlying Shares and related dividend equivalent cash payment shall be delivered simultaneously with the closing of the applicable transaction such that Recipient will participate as a shareholder in receiving proceeds from such transaction with respect to those Shares.
- 6. Changes in Capital Structure. If, prior to the full vesting of all of the RSUs granted under this Agreement, the outstanding Common Stock of the Company is increased or decreased or changed into or exchanged for a different number or kind of shares or other securities of the Company by reason of any stock split, combination of shares or dividend payable in shares, recapitalization or reclassification, appropriate adjustment shall be made by the Committee in the number and kind of shares subject to the unvested RSUs so that Recipient's proportionate interest before and after the occurrence of the event is maintained. Notwithstanding the foregoing, the Committee shall have no obligation to effect any adjustment that would or might result in the issuance of fractional shares, and any fractional shares resulting from any adjustment may be disregarded or provided for in any manner determined by the Committee. Any such adjustments made by the Committee shall be conclusive.

7. Recoupment On Misconduct.

7.1 If at any time before a Change in Control and within three years after any date on which any RSUs vested, (a) the Company's financial statements for the corresponding Performance Year are the subject of a restatement due to the Misconduct (as defined below) of any person (whether or not Recipient was personally involved in such Misconduct), and (b) based on the Company's financial statements as restated, the Performance Threshold was not satisfied for that Performance Year, then Recipient shall repay to the Company the Shares (the "Excess Shares") and dividend equivalent cash payment (the "Excess Dividends") that vested under this Agreement on that vesting date. If any Excess Shares are sold by Recipient prior to the Company's demand for repayment (including any shares withheld for taxes under Section 4 of this Agreement), Recipient shall repay to the Company 100% of the proceeds of such sale or sales. The Committee may, in its sole discretion, reduce the amount to be repaid by Recipient to take into account the tax consequences of such repayment for Recipient.

8				

- 7.2 If the Committee determines that Recipient engaged in any Misconduct after the date of this Agreement and prior to a sale of any of the Shares (the "Tainted Shares"), and this determination is made before a Change in Control and within three years after the vesting of the Tainted Shares, Recipient shall repay to the Company the Excess Proceeds (as defined below). The Committee may, in its sole discretion, reduce the amount of Excess Proceeds to be repaid by Recipient to take into account the tax consequences of such repayment or any other factors. The return of Excess Proceeds is in addition to and separate from any other relief available to the Company due to Recipient's Misconduct.
- 7.3 "Misconduct" shall mean (a) willful commission of an act of fraud or dishonesty resulting in economic or financial injury to the Company, (b) willful misconduct that substantially impairs the Company's business or reputation, or (c) willful gross negligence in the performance of the person's duties; provided, however, that such acts shall only constitute Misconduct if the Committee determines that such acts contributed to an obligation to restate the Company's financial statements for any quarter or year or otherwise had (or will have when publicly disclosed) an adverse impact on the market price of the Company Common Stock.
- 7.4 "Excess Proceeds" shall mean the excess of (a) the actual aggregate sales proceeds from Recipient's sales of Tainted Shares, over (b) the aggregate sales proceeds Recipient would have received from sales of Tainted Shares at a price per share determined appropriate by the Committee in its discretion to reflect what the market price of the Company Common Stock would have been if the restatement had occurred or other Misconduct had been disclosed prior to such sales.
- 7.5 If any portion of the Excess Shares and Excess Dividends was deferred under the DCP, that portion shall be recovered by canceling the amounts so deferred under the DCP and any dividends or other earnings credited under the DCP with respect to such cancelled amounts. The Company may seek direct repayment from Recipient of any Excess Shares, Excess Dividends and Excess Proceeds not so recovered and may, to the extent permitted by applicable law, offset such amounts against any compensation or other amounts owed by the Company to Recipient. In particular, such amounts may be recovered by offset against the after-tax proceeds of deferred compensation payouts under the DCP, Northwest Natural's Executive Supplemental Retirement Income Plan or Northwest Natural's Supplemental Executive Retirement Plan at the times such deferred compensation payouts occur under the terms of those plans. Amounts that remain unpaid for more than 60 days after demand by the Company shall accrue interest at the rate used from time to time for crediting interest under the DCP.
- 8. Approvals. The obligations of the Company under this Agreement are subject to the approval of state and federal authorities or agencies with jurisdiction in the matter. The Company will use its best efforts to take steps required by state or federal law or applicable regulations, including rules and regulations of the Securities and Exchange Commission and any stock exchange on which the Company's shares may then be listed, in connection with the award under this Agreement. The foregoing notwithstanding, the Company shall not be obligated to issue or deliver Common Stock under this Agreement if such issuance or delivery would violate applicable state or federal law.

9

9. No Right to Employment. Nothing contained in this Agreement shall confer upon Recipient any right to be employed by
the Employer or to continue to provide services to the Employer or to interfere in any way with the right of the Employer to
terminate Recipient's services at any time for any reason, with or without cause.

10. Miscellaneous.

- 10.1 Entire Agreement; Amendment. This Agreement constitutes the entire agreement of the parties with regard to the subjects hereof and may be amended only by written agreement between the Company and Recipient.
- 10.2 Notices. Any notice required or permitted under this Agreement shall be in writing and shall be deemed sufficient when delivered personally to the party to whom it is addressed or when deposited into the United States Mail as registered or certified mail, return receipt requested, postage prepaid, addressed to the Company, Attention: Corporate Secretary, at its principal executive offices, or to Employer, Attention: Corporate Secretary, at its principal executive offices, or to Recipient at the address of Recipient in the Company's records, or at such other address as such party may designate by ten (10) days' advance written notice to the other party.
- 10.3 <u>Assignment: Rights and Benefits</u>. Recipient shall not assign this Agreement or any rights hereunder to any other party or parties without the prior written consent of the Company. The rights and benefits of this Agreement shall inure to the benefit of and be enforceable by the Company's successors and assigns and, subject to the foregoing restriction on assignment, be binding upon Recipient's heirs, executors, administrators, successors and assigns.
- 10.4 <u>Further Action</u>. The parties agree to execute such further instruments and to take such further action as may reasonably be necessary to carry out the intent of this Agreement.
- 10.5 <u>Applicable Law: Attorneys' Fees</u>. The terms and conditions of this Agreement shall be governed by the laws of the State of Oregon. In the event either party institutes litigation hereunder, the prevailing party shall be entitled to reasonable attorneys' fees to be set by the trial court and, upon any appeal, the appellate court.
- 10.6 <u>Counterparts</u>. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original.

10				
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NORTHWEST NATURAL HOLDING COMPANY	
Ву	
Title	
RECIPIENT	

EFFECTIVE INTEREST RATES OF OUTSTANDING LONG-TERM DEBT

The outstanding series or tranches of long-term debt of the Company outstanding as of the date of this Agreement and the Effective Interest Rate of each such series or tranche are as follows:

<u>Series</u>	Effective Interest Rate
Corp 5000:	
9.050 % Series due 2021	9.163%
3.176 % Series due 2021	3.319%
3.542 % Series due 2023	3.696%
5.620 % Series due 2023	6.360%
7.720 % Series due 2025	8.336%
6.520 % Series due 2025	6.589%
7.050 % Series due 2026	7.121%
3.211 % Series due 2026	3.383%
7.000 % Series due 2027	7.062%
6.650 % Series due 2027	6.714%
2.822 % Series due 2027	2.966%
6.650 % Series due 2028	6.727%
3.141 % Series due 2029	3.275%
7.740 % Series due 2030	8.433%
7.850 % Series due 2030	8.551%
5.820 % Series due 2032	5.913%
5.660 % Series due 2033	5.723%
5.250 % Series due 2035	5.316%
4.000 % Series due 2042	4.062%
4.136 % Series due 2046	4.226%
3.685 % Series due 2047	3.754%
4.110 % Series due 2048	4.145%
3.869 % Series due 2049	3.938%
3.600 % Series due 2050	3.689%
Corp 6000:	
2.400 % weighted rate Notes	2.400%
5.000 % Note due 2028	5.000%
LIBOR Loan – weighted rate	0.770%

SUBSIDIARIES OF NORTHWEST NATURAL HOLDING COMPANY

an Oregon Corporation

Name of Subsidiary	Jurisdiction Organized
Northwest Natural Gas Company (dba NW Natural)	Oregon
Northwest Energy Corporation ⁽¹⁾	Oregon
NWN Gas Reserves LLC ⁽¹⁾	Oregon
NW Natural RNG Holding Company, LLC(1)	Oregon
Lexington Renewable Energy LLC ⁽¹⁾	Delaware
NW Natural Energy, LLC	Oregon
NW Natural Gas Storage, LLC	Oregon
NNG Financial Corporation	Oregon
Northwest Biogas, LLC	Oregon
KB Pipeline Company	Oregon
NW Natural Water Company, LLC	Oregon
Salmon Valley Water Company	Oregon
NW Natural Water of Oregon, LLC	Oregon
Sunstone Water, LLC	Oregon
Sunstone Infrastructure, LLC	Oregon
Sunriver Water LLC	Oregon
Sunriver Environmental LLC	Oregon
NW Natural Water of Washington, LLC	Washington
Cascadia Water, LLC	Washington
Cascadia Infrastructure, LLC	Washington
Suncadia Water Company, LLC	Washington
Suncadia Environmental Company, LLC	Washington

Exhibit 21

NW Natural Water of Idaho, LLC	Idaho
Falls Water Co., Inc.	ldaho
Gem State Water Company, LLC	ldaho
Gem State Infrastructure, LLC	ldaho
NW Natural Water of Texas, LLC	Texas
Blue Topaz Water, LLC	Texas
Blue Topaz Infrastructure, LLC	Texas
T & W Water Service Company	Texas

(1) Subsidiary of Northwest Natural Gas Company

Exhibit 23a

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos 333-187005-01, 333-180350-01, 333-134973-01, 333-100885-01, 333-139819-01, 333-221347-01, 333-227687, and 333-234539) and Form S-3 (No 333-227662) of Northwest Natural Holding Company of our report dated February 26, 2021 relating to the financial statements, financial statement schedules and the effectiveness of internal control over financial reporting, which appears in this Form 10-K

/s/ PricewaterhouseCoopers LLP Portland, Oregon February 26, 2021

				Exhibit 23b
	CONSENT OF INDEPENDENT REGIS	STERED PUBLIC ACCOUNTING	FIRM	
We hereby consent to the incorporation Northwest Natural Gas Company of ou Form 10-K	n by reference in the Registration Statemer ir report dated February 26, 2021 relating t	nts on Form S-8 (No 333-214425) at the financial statements and financial statements.	and Form S-3 (No 333-227662-01) of a statement schedule which appear	of ars in this
s/PricewaterhouseCoopers LLP Portland, Oregon February 26, 2021				

- I, David H. Anderson, certify that:
- 1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2020 of Northwest Natural Gas Company,
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report,
- 3 Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report,
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared,
- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation, and
- (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions)
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2021

/s/ David H. Anderson
David H. Anderson
President and Chief Executive Officer

I, Frank H. Burkhartsmeyer, certify that:

- 1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2020 of Northwest Natural Gas Company,
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report,
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared:
- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting, and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions)
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2021

/s/ Frank H. Burkhartsmeyer
Frank H. Burkhartsmeyer
Senior Vice President and Chief Financial Officer

- I, David H. Anderson, certify that
- 1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2020 of Northwest Natural Holding Company,
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report,
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation, and
- (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting, and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2021

\(\lambda\) David H. Anderson

David H. Anderson

President and Chief Executive Officer

I. Frank H. Burkhartsmever, certify that:

- 1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2020 of Northwest Natural Holding Company:
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2021

Is/ Frank H. Burkhartsmeyer
Frank H. Burkhartsmeyer
Senior Vice President and Chief Financial Officer

EXHIBIT 32.1

NORTHWEST NATURAL GAS COMPANY

Certificate Pursuant to Section 906 of Sarbanes – Oxley Act of 2002

Each of the undersigned, DAVID H. ANDERSON, Chief Executive Officer, and FRANK H. BURKHARTSMEYER, the Chief Financial Officer, of NORTHWEST NATURAL GAS COMPANY (the Company), DOES HEREBY CERTIFY that:

- 1. The Company's Annual Report on Form 10-K for the year ended December 31, 2020 (the Report) fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and
- 2 Information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF, each of the undersigned has caused this instrument to be executed this twenty-sixth day of February 2021.

/s/ David H. Anderson
David H. Anderson
President and Chief Executive Officer

/s/ Frank H. Burkhartsmeyer
Frank H. Burkhartsmeyer
Senior Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to Northwest Natural Gas Company and will be retained by Northwest Natural Gas Company and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 32.2

NORTHWEST NATURAL HOLDING COMPANY

Certificate Pursuant to Section 906 of Sarbanes – Oxley Act of 2002

Each of the undersigned, DAVID H. ANDERSON, Chief Executive Officer, and FRANK H. BURKHARTSMEYER, the Chief Financial Officer, of NORTHWEST NATURAL HOLDING COMPANY (the Company), DOES HEREBY CERTIFY that:

- 1. The Company's Annual Report on Form 10-K for the year ended December 31, 2020 (the Report) fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- 2. Information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF, each of the undersigned has caused this instrument to be executed this twenty-sixth day of February 2021.

/s/ David H. Anderson
David H. Anderson
President and Chief Executive Officer

/s/ Frank H. Burkhartsmeyer
Frank H. Burkhartsmeyer
Senior Vice President and Chief Financial Officer

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to Northwest Natural Holding Company and will be retained by Northwest Natural Holding Company and furnished to the Securities and Exchange Commission or its staff upon request.

Attachment

6

Belle Oaks Depreciation Schedule

						Accum	
		Install		Life	Annual	Depr	Net
Waste Water System		<u>Date</u>	<u>Cost</u>	in years	Depr Exp	<u>2021</u>	<u>Plant</u>
	Land - WWTP	2005	52,288	0	0	-	52,288
	WWTP 14,000 GPD	2020	178,557	50	3,571	3,571	174,986
	Liftstation @ WWTP	2005	58,060	25	2,322	37,158	20,902
	Influent Piping to WWTP - 3" forced Main	2005	2,340	25	94	1,498	842
	Effluent Piping from Plant - 10" HDPE DR11	2005	22,000	50	440	7,040	14,960
	Gravity Collect System	2005	294,610	50	5,892	94,275	200,335
	Forced Main - 3" PVC PVC SDR26	2005	28,675	50	574	9,176	19,499
	Fiberglass San Sewer Manholes - 4' Dia	2005	80,000	25	3,200	51,200	28,800
	Lift Station Phase II	2020	89,373	25	3,575	3,575	85,798
	Sanitary Sewer Taps to Lots	2005	83,300	50	1,666	26,656	56,644
Total Waste Water System			889,203		21,334	234,149	655,054
Water System							
	Connection to W Jefferson Co MWD	2005	6,855	50	137	2,194	4,661
	Bore under Bayou - 8" HDPE SDR11	2005	169,200	50	3,384	54,144	115,056
	Water Main 8" PVC C-900	2005	104,500	50	2,090	33,440	71,060
	Water Main 6" PVC C-901	2005	103,800	50	2,076	33,216	70,584
	Fire Hydrant	2005	30,400	50	608	9,728	20,672
	Current Meters	2005	12,369	10	1,237	12,369	-
	Current Taps for Meters	2005	42,500	20	2,125	34,000	8,500
Total Water System		-	469,624		11,657	179,091	290,533
Grand Total	Utility Plant	3	1,358,827		32,991	413,240	945,587
	Customer CIAC		(138,169)		(5,028)	(73,025)	(65,144)
	Developer CIAC		(1,220,658)		(27,963)	(340,215)	(880,443)
	Total CIAC		(1,358,827)		(32,991)	(413,240)	(945,587)

Attachment

7

PWS LIST AND TCEQ COMPLIANCE CORRESPONDENCE

T & W WATER SERVICE COMPANY

TCEQ Public Water System Information

Name of PWS	Date of TCEQ Inspections	Subdivision Served
Deer Pines	Not Inspected	Deer Pines
Deer Run	6/26/2014	Deer Run
Emerald Lakes	4/21/2016	Emerald Lakes
Encino Estates	Not Inspected	Encino Estates
Falls of Wildwood	8/6/2019	Falls of Wildwood
Gemstone (dissolved and incorporated into Grand Harbo	Not Inspected r several years ago)	Gemstone
Grand Harbor	3/28/2014	Grand Harbor
Harborside	3/28/2014	Harborside
Hidden Springs Ranch (dissolved and incorporated into Emerald Lake	Not Inspected es several years ago)	Hidden Springs Ranch
Hydie's Crossing	5/2/2017	Hydie's Crossing
Millers Crossing	7/12/2018	Millers Crossing
Oaks of Trinity	1/31/2019	Oaks of Trinity
Old Mill Lake	5/28/2014	Old Mill Lake
Rio Vista	10/17/2014	Rio Vista
Riverwalk	6/15/2016	Riverwalk
Southwind Ridge	Not Inspected	Southwind Ridge
Splendora Woods	7/16/2019	Splendora Woods and Spring Forest Estates
Spring Oaks	7/16/2019	Spring Oaks
Sunrise Ranch	12/21/2016	Sunrise Ranch
The Ranch	10/20/2015	The Ranch
Thousand Oaks	10/23/2015	Thousand Oaks

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Zak Covar, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 14, 2014

Mr. Ronald L. Payne, President T & W Water Service Company P O Box 2927 Conroe, Texas 77305-2927

Re:

Notice of Compliance with Notice of Violation (NOV) dated June 6, 2013: Deer Run, 10550 Fawn Mist Drive, Conroe, Montgomery County, Texas Regulated Entity No.: 102673027

TCEQ ID No. 1700700 Investigation No. 1178405

Dear Mr. Payne:

On June 26, 2014, the Texas Commission on Environmental Quality (TCEQ) Houston Region Office received adequate compliance documentation to resolve the alleged violation documented during the investigation of the above-referenced regulated entity conducted on April 26, 2013. Based on the information submitted, no further action is required concerning this investigation.

The Texas Commission on Environmental Quality appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions, please feel free to contact Ms. Maggie Wright in the Houston Region Office at (713)767-3650.

Sincerely.

Leticia De Leon, Team Leader

Public Water Supply Houston Region Office

LD/mw/kc

cc:

Enclosure: Summary of Investigation Findings

Montgomery County Environmental Health Services

Summary of Investigation Findings

DEER RUN

Investigation #

1178405 Investigation Date: 06/26/2014

, MONTGOMERY COUNTY,

Additional ID(s): 1700700

ALLEGED VIOLATION(S) NOTED AND RESOLVED

Track No: 501223

30 TAC Chapter 290.39(j)

Alleged Violation:

Investigation, 1086272

Comment Date: 05/13/2013

Examination of Plans and Specifications

Failure to notify the executive director prior to making any significant change or addition to the system's production, treatment, storage, pressure maintenance, or distribution facilities.

Please be aware that all change requests must be in writing and submitted to Austin for approval to the: Texas Commission on Environmental Quality, Technical Review and Oversight Team (MC-159), P.O. Box 13087, Austin, Texas 78711-3087, phone (512)239-4691.

At the time of the inspection, the system was using polyphosphate. The system did not provide the approval letter for the installation of the polyphosphate.

Investigation: 1138736

Comment Date: 12/12/2013

Examination of Plans and Specifications

Failure to notify the executive director prior to making any significant change or addition to the system's production, treatment, storage, pressure maintenance, or distribution facilities.

Please be aware that all change requests must be in writing and submitted to Austin for approval to the: Texas Commission on Environmental Quality, Technical Review and Oversight Team (MC-159), P.O. Box 13087, Austin, Texas 78711-3087, phone (512)239-4691.

At the time of the inspection, the system was using polyphosphate. The system did not provide the approval letter for the installation of the polyphosphate.

As of this date, this violation still exists.

Investigation: 1178405

Comment Date: 06/26/2014

Failure to notify the executive director prior to making any significant change or addition to the system's production, treatment, storage, pressure maintenance, or distribution facilities.

Recommended Corrective Action: Submit a copy of the approval letter for the polyphosphate to verify compliance.

Resolution: An emailed copy of the notification for the usage of polyhosphate was submitted, reviewed, and approved by Plans and Technical Review on 07/23/2013.

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Jon Niermann, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 26, 2016

Mr. Ron Payne, President T & W Water Service Company PO Box 2927 Conroe, Texas 77305-2927

Re: Comprehensive Compliance Investigation at:

Emerald Lakes Subdivision, 1505 Emerald Lakes Dr., Willis, Montgomery County, Texas Regulated Entity No.: 105348932, TCEQ ID No.: 1700777, Investigation No.: 1335957

Dear Mr. Payne:

On April 21, 2016, Ms. Dawn Olivo, of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office, conducted an investigation of the above-referenced facility to evaluate compliance with the applicable requirements for public water supply systems. No violations are being alleged as a result of the investigation. In addition, please be advised that a violation could be issued upon further review of your system's records or self-reported documentation.

The TCEQ appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact Ms. Olivo in the Houston Region Office at (713) 767-3650.

Sincerely,

Latrichia Spikes, Team Leader

Public Water Supply Houston Region Office

LS/DO/ra

c: Montgomery County Environmental Health Services

Jon Niermann, Chairman Emily Lindley, Commissioner Toby Baker, Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 30, 2019

CERTIFIED MAIL #91 7199 9991 7038 7382 1634 ELECTRONIC RECEIPT REQUESTED

Mr. Ronald Payne President T&W Water Service Company Post Office Box 2927 Conroe, Texas 77305-2927

Re: Notice of Violation for the Comprehensive Compliance Investigation at:
Falls of Wildwood, 14619 ½ Majestic Oaks, Pinehurst, Montgomery County, Texas
Regulated Entity No.: 101282895 TCEQ ID No.: 1700673 Investigation No.: 1582216

Dear Mr. Payne:

On August 6, 2019, Ms. Destiny Geppert of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted an investigation of the above-referenced regulated entity to evaluate compliance with applicable requirements for Public Water Supply. Enclosed is a summary which lists the investigation findings. During the investigation, a certain outstanding alleged violation was identified for which compliance documentation is required. In addition, an Additional Issue was noted. Please submit to this office by the compliance due date listed on the Summary of Investigation Findings enclosure, a written description of corrective action taken and the required documentation demonstrating that compliance has been achieved for each of the outstanding alleged violation.

In the listing of the alleged violation, we have cited applicable requirements, including TCEQ rules. Please note that both the rules themselves and the agency brochure entitled Obtaining TCEQ Rules (GI 032) are located on our agency website at http://www.tceq.texas.gov for your reference. If you would like a hard copy of this brochure mailed to you, you may call and request one from either the Houston Region Office at (713) 767-3650 or the Central Office Publications Ordering Team at (512) 239-0028.

The TCEQ appreciates your assistance in this matter. Please note that the Legislature has granted TCEQ enforcement powers which we may exercise to ensure compliance with environmental regulatory requirements. We anticipate that you will resolve the alleged violations as required in order to protect the State's environment. If you have additional information that we are unaware of, you have the opportunity to contest the violations documented in this notice. Should you choose to do so, you must notify the Houston Region Office within 10 days from the date of this letter. At that time, PWS Team Leader, Ms. Nichole Batista Nunes, will schedule a violation review meeting to be conducted within 21 days from the date of this letter. However, please be advised that if you decide to participate in the violation review process, the TCEQ may still require you to adhere to the compliance schedule included in the attached Summary of Investigation Findings until an official decision is made regarding the status of the contested violation.

TCEQ Region 12 • 5425 Polk St., Ste. H • Houston, Texas 77023-1452 • 713-767-3500 • Fax 713-767-3520

Austin Headquarters: 512-239-1000 • tceq.texas.gov • How is our customer service? tceq.texas.gov/customersurvey

Mr. Ronald Payne, President Page 2 August 30, 2019

If you or members of your staff have any questions, please feel free to contact Ms. Geppert in the Houston Region Office at (713) 767-3729.

Sincerely,

Nichole Batista Nunes

Mouse

Team Leader

Public Water Supply Houston Region Office

NBN/DG/sh

cc:

Montgomery County Environmental Health Services 501 North Thompson, Suite 101 Conroe, Texas 77301-2500

Enclosure: **Summary of Investigation Findings**

Summary of Investigation Findings.

FALLS OF WILDWOOD

Investigation #

1582216 Investigation Date: 08/06/2019

MONTGOMERY COUNTY,

Additional ID(s): 1700673

OUTSTANDING ALLEGED VIOLATION(S) ASSOCIATED TO A NOTICE OF VIOLATION

Track No: 726659 Compliance Due Date: 11/28/2019

30 TAC Chapter 290.41(c)(3)(A)

Alleged Violation:

Investigation: 1582216

Comment Date: 08/29/2019

Failure to submit a furnished copy of well completion data to executive director for final approval for well No. 2, G1700673B.

At the time of the investigation, it was noted that the system was granted emergency authorization to drill well No. 2, G1700673B, by TCEQ letter dated March 16, 2018. However, the system did not provide a copy of the approval to use letter.

Before placing the well into service, a public water system shall furnish a copy of the well completion data, which includes the following items: the Driller's Log (geological log and material settling report); a cementing certificate; the results of a 36-hour pump test; the results of the microbiological and chemical analyses required by subparagraphs (F) and (G) of this paragraph; a legible copy of the recorded deed or deeds for all real property within 150 feet of the well; a legible copy of the sanitary control easement(s) or other documentation demonstrating compliance with paragraph (1)(F) of this subsection; an original or legible copy of a United States Geological Survey 7.5-minute topographic quadrangle showing the accurate well location to the executive director; and a map demonstrating the well location in relation to surrounding property boundaries. All the documents listed in this paragraph must be approved by the executive director before final approval is granted for the use of the well.

Recommended Corrective Action: Submit compliance documentation demonstrating that corrective measures have been taken to resolve the alleged violation.

ADDITIONAL ISSUES

Description

Additional Comments

tem #2

TAC, §290.42(b)(2)/ 30 TAC, §290.105, §290.118 (SCLs)
Chemical Analysis
Fallure to meet the commission's minimum standards noted in the most recent chemical analysis conducted by the certified laboratory which indicates the quality of the water produced by the system for secondary standards.

The most recent chemical analysis for iron was conducted on samples collected on December 4, 2017, The concentration of from the samples indicated the constituent is above the SMCL of 0.03 mg/L. The concentration of iron was 0.502 mg/L. The concentration of aluminum in the samples indicated the constituent is above the SMCL of 0.05 to 0.2 mg/L. The concentration of aluminum was

Consequently, facilities must provide equipment to sequester the iron or to reduce the concentration of the constituent to acceptable levels. Please be aware that if sequestering facilities prove to be ineffective, the agency will require the concentration of the constituent to be reduced. Please be advised that public water systems shall notify the executive director prior to making any change or addition to the system's treatment facilities.

0.694 mg/L.

WATERENGINEERS, INC.

WATER & WASTEWATER TREATMENT CONSULTANTS

17230 HUFFMEISTER ROAD, SUITE A ~ CYPRESS, TEXAS 77429-1643

TEL: 281-373-0500 FAX: 281-373-1113

March 12, 2020

Ms. Destiny Geppert
Texas Commission on Environmental Quality
Environmental Investigator
5425 Polk Street, Suite H
Houston, Texas 77023

Re: Fal

Falls of Wildwood – PWS ID: 1700673 RN: 101282895; CN: 601363005 Montgomery County, Texas

Dear Ms. Geppert:

This letter is in response to Falls of Wildwood Water System's outstanding violation from the August 6, 2019 investigation regarding the failure to submit well completion data for Well 2, G1700673B, for approval to use.

The following is the interim progress report outlining the status of the outstanding violation. Prior to being able to submit the well completion data, there were two exceptions that needed to be requested and granted. WaterEngineers, Inc. submitted the exception request on September 18, 2019. On December 17, 2019, the TCEQ granted one of the exceptions, however they requested additional information on the second exception. WaterEngineers, Inc. resubmitted the exception request to the TCEQ on December 26, 2019. There is a 100-day review period for exception requests. A response from the TCEQ is expected mid-April 2020.

Once the exception request has been granted by the TCEQ, the well completion data will be submitted to the TCEQ's Plan View Team for approval to use the well. Therefore, approval to use the water well cannot be obtained until end of June 2020. Upon receiving the approval to use, notification will be sent to the TCEQ Houston regional office.

If you have any questions or would like further information, I can be reached by telephone at 281-373-0500 or by email at <u>Kalena@waterengineers.com</u>.

Sincerely,

WATERENGINEERS, INC.

Kalena Hewitt, P.E.

cc: Ron Payne via email at Ron@twwaterservice.com

TCEQ Region 12 via email to R12PWS@tceq.texas.gov

Jon Niermann, Chairman Emily Lindley, Commissioner Bobby Janecka, Commissioner Toby Baker, Executive Director



PWS_1700673_CO_20210128_Exception

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 28, 2021

Mr. Peter T. Gregg Duboise, Bryant and Campbell 303 Colorado, Suite 2300 Austin, Texas 78701

Re:

Falls of Wildwood - PWS ID No. 1700673

Request for an Exception to the Sanitary Control Easement Requirement Request for an Exception to the Well Location in Unsanitary Surroundings

Prohibition

Request for an Exception to the Well Setback Distance to a Storm Sewer

Requirement

Proposed Well No. 2 (TCEQ Well ID: G1700673B)

Montgomery County, Texas RN 101282895 | CN 601363005

Dear Mr. Gregg:

On October 19, 2020, the Texas Commission on Environmental Quality (TCEQ) received your letter of the same date, on behalf of T & W Water Services Company, owner of the Falls of Wildwood public water system (PWS) requesting several exceptions. The following exceptions are requested: an exception to the requirement that all public water supply wells have properly recorded sanitary control easements as specified in Title 30 of the Texas Administrative Code (30 TAC) §290.41(c)(1)(F), an exception to the requirement that all public water supply wells be at least 300-feet from a drainage ditch which contains industrial waste discharges or the wastes from sewage treatment systems as specified in 30 TAC §290.41(c)(1)(B), and an exception to the requirement that all public water supply wells be at least 50-feet from storm sewers as specified in 30 TAC §290.41(c)(1)(A). These requests are for the PWS's proposed Well No. 2 (TCEQ Well ID: G1700673B) which is located at the geographic coordinates of latitude 30°12'36.88"N and longitude 95°41'20.14"W. After further review of the well's location and the subject drainage ditch, the TCEQ determined to evaluate the request under the requirements stated in 30 TAC §290.41(c)(1), for proximity to unsanitary surroundings. Each of the requests are addressed separately below.

Background

Proposed Well No. 2 was drilled on an emergency basis and is in use as an unapproved PWS supply well. Previously, the TCEQ Plan Review Team's (PRT) letter dated March 16, 2018 (Plan Review Log No. P-03152018-110) authorized the construction of proposed Well No. 2 and stated approval of the well for use required the submittal of additional information for the TCEQ's review within two months of the date of the letter (i.e. May 16, 2018). The information was not submitted according to our records. The TCEQ Houston Region 12 office conducted a Comprehensive Compliance Investigation (CCI) in August 2019 which resulted in the PWS receiving a notice of violation for failure to submit a copy of the well completion data for

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Mr. Peter T. Gregg Page 2 of 6 January 28, 2021

proposed Well No. 2 to the TCEQ as required by the March 16, 2018 letter. The PWS is now in the process of obtaining approval for use as a PWS source from the TCEQ.

Sanitary Control Easement Requirement §290.41(c)(1)(F)

The PWS does not own any of the property within 150-foot radius of proposed Well No. 2 and accesses the well via Majestic Oaks Street. The TCEQ reviewed the Montgomery Central Appraisal District online maps which confirms there is no access to proposed Well No. 2 from PWS-owned property. In a previous exception request submittal dated September 18, 2019 from the PWS consultant, Ms. Kalena Hewitt, P.E., it was indicated in the cover letter that owners of 3 tracts of land not owned by the PWS within a 150-foot radius of proposed Well No. 2 were solicited for a sanitary control easement (SCE). Documentation in the form of certified mail receipts for the SCE solicitation correspondence sent to three (3) landowners was provided. Only one of the three solicitations were successfully delivered.

The TCEQ's review of the supporting documentation for the SCE exception determined that the PWS does not own the land where proposed Well No. 2 is constructed. Proposed Well No. 2 is located on a property that is owned by Colin James Custom Homes, Inc. ("CJCH"). The PWS was unable to secure an access agreement to install, operate and maintain the well on the property or secure title to the property due to the owner being incommunicado. Because the property owned by CJCH was not fully transferred before the developer's departure, the PWS has no legal access and therefore poses a unique case for the TCEQ's review of the SCE exception. The PWS proposes the following in lieu of providing the documentation stated in the requirements of 290.41(c)(1)(F):

1. The provided plat, filed on August 31, 2000, indicates the Restricted Reserve B is restricted for water supply purposes. "The plat also reflects that access to the plant is directly from the cul-de-sac of Majestic Oaks, a public road."

2. "T& W and the Community Association has developed a proposed "Dedication of Water Utility Easement (Attachment C, [of the submittal]) to dedicate an easement without warranty in the "Reserve B" tract from the Community Association in favor of T & W for the installation and operation of the water plant, as well as ingress and egress for those purposes. The easement will provide T & W the real property interests in and to the water plant site pursuant to the Community Association's rights under its Declaration of Covenants, Conditions, Restrictions and Easements ("Declaration") to restrict property in the subdivision for purposes of the provision of water utility service."

3. "Further T & W and the Community Association have developed the attached "Sanitary Control Easement" (Attachment D, [of the submittal]) to restrict the property to the north of the water plant pursuant the Chapter 290 sanitary control easement requirements. Again, that easement without warranty is provided pursuant to the Community Association's authority to restrict property in the subdivision for purposes of the provision of water utility service."

 The cover letter describing how the Community Association is engaged in activities ordinarily associated with property ownership, such as paying taxes.

After discussions between the TCEQ Legal Division and the PWS, the TCEQ Water Supply Division accepts the proposed alternative. The Community Association allows the T & W PWS to provide a level of sanitary control to the best of the PWS's ability given the circumstances. The TCEQ recognizes that the landowner may return in the future and the PWS could potentially face an issue should access to the well site be restricted. The PWS is encouraged to maintain compliance with the PWS requirements and continue its efforts to reach the owner.

The TCEQ has determined that the inability to secure sanitary control easements indicates that this groundwater source may be susceptible to bacteriological contamination and may result in a risk to public health. In order to allow monitoring of the well to determine if the well has been impacted by the lack of sanitary control, we are granting your exception request until

Mr. Peter T. Gregg Page 3 of 6 January 28, 2021

January 31, 2024, to the sanitary control easement requirement, under the conditions listed below. This exception applies to all of the property within a 150-foot radius of proposed Well No. 2:

Owner Colin James Custom Homes, Inc.	38103 Cascade Court Magnolia, Texas 77354	Falls of Wildwood, Res A, Acres 4.5273
		Falls of Wildwood, Res B, acres 0.2297
Troy & Tanya Monson	14618 Majestic Oaks Magnolia, Texas 77354	Falls of Wildwood, Block 1, Lot 1
Marcos & Maria Cortez	14610 Majestic Oaks Magnolia, Texas 77354	Falls of Wildwood, Block 1, Lot 2
第一个的企业的对象的 而不 到的 的	WAROAR Right of Way	TO WHAT THE PROPERTY OF THE PARTY OF THE PAR
Majestic Oaks Street		

In accordance with 30 TAC §290.46(b) and §290.109(d)(4)(E), the PWS is required to fulfill the conditions of approval outlined below.

Condition 1:

 The PWS must comply with all of the requirements and conditions discussed in the exception request to the <u>Well Setback to a Storm Sewer Requirement - 30 TAC</u> \$290.41(c)(1)(A).

Condition 2:

 This exception will expire 36 months from the date of this letter (January 31, 2024).

Well Location in Unsanitary Surroundings Prohibition - 30 TAC \$290.41(c)(1)

In the previous submittal received on December 27, 2019, the PWS's consultant requested the well setback distance exception under 30 TAC §290.41(c)(1)(B), however, no information was provided about the suspected presence of on-site sewage facilities (OSSF) nearby were provided. A completed well pollution hazard survey checklist and site plan provided for Well No. 2 indicated the well is in proximity to a surface water body (a pond) approximately 80-feet away in the southeast direction. The TCEQ is concerned about the risk the pond may attract wildlife and other vectors that could harbor pathogens. Also, the TCEQ requires that certain drainage ditches be located no closer than 300-feet to a PWS supply well. According to an aerial image, the neighboring properties may utilize on-site sewage facilities (OSSF) which may drain toward the pond.

The TCEQ has determined that the inability to maintain a minimum well setback distance indicates that this groundwater source may be susceptible to fecal contamination and may result in a risk to public health. In order to allow monitoring of the well to determine if the well has been impacted by nearby pond suspected use of OSSF, we are granting your request until January 31, 2024 for an exception to the well setback requirement between PWS wells and a drainage ditch which contains wastes from sewage treatment systems, under the conditions listed below. This exception applies to proposed Well No. 2 (TCEQ Well ID: G1700673B). In accordance with 30 TAC §290.46(b) and §290.109(d)(4)(E), the PWS is required to fulfill the conditions outlined below.

Mr. Peter T. Gregg Page 4 of 6 January 28, 2021

Condition 1:

 The PWS must comply with all of the requirements and conditions discussed in the exception request to the <u>Well Setback to a Storm Sewer Requirement - 30 TAC</u> \$290.41(c)(1)(A).

Condition 2:

 This exception will expire 36 months from the date of this letter (January 31, 2024).

Well Setback to a Storm Sewer Requirement - 30 TAC 6290.41(c)(1)(A)

The TCEQ requires that storm sewers be located no closer than 50-feet to a PWS supply well. The September 18, 2019 submittal included a completed well pollution hazard survey checklist and site plan showing the proximity of a storm water swale within 50-feet of proposed Well No. 2. Stormwater swales convey stormwater for similar durations as stormwater sewers and the TCEQ considers storm sewer swales to be a potential hazard to a PWS well because runoff may be impacted by bacteriological and chemical contaminants. In addition, a perennial surface water body is located approximately 80-feet from proposed Well No. 2 and several residences nearby that may utilize on-site sewage and sanitary facilities (OSSF) which further raises the concerns of bacteriological contamination. The TCEQ reviewed the description of the lithology in the provided State of Texas Well Report for Tracking #481316, well report for proposed Well No. 2. The lithology is characterized by intermittent layers of clay and sand or gravel and indicates two sufficiently thick layers of clay that would be considered to be protective of the groundwater well source. However, with the proximity of the stormwater swale and perennial surface water body, the TCEQ is concerned infiltration of contaminated stormwater may impact the groundwater well.

The TCEQ has determined that the inability to maintain a minimum well setback distance of 50-feet from the stormwater swale indicates that this groundwater source may be susceptible to fecal contamination and may result in a risk to public health. In order to allow monitoring of the well to determine if the well has been impacted by a stormwater swale, we are granting your request for an exception until January 31, 2024 for an exception to the well setback requirement between PWS wells and a stormwater swale under the conditions listed below. This exception applies to proposed Well No. 2 (TCEQ Well ID: G1700673B).

In accordance with 30 TAC \$290.46(b) and \$290.109(d)(4)(E), the PWS is required to fulfill the conditions of approval outlined below.

Condition 1:

 Starting the date of this letter, PWS must collect two raw water samples per month from Well No. 2. The interval between samples must not be fewer than 10 calendar days. The PWS must submit the samples for bacteriological analysis at a TCEQ-accredited laboratory with a current National Environmental Laboratory Accreditation Program (NELAP) certification.

The sampling procedure should be the same as the one used when collecting routine distribution samples. The sample must be delivered to the laboratory clearly labeled with the proper TCEQ Well ID (G1700673B) and marked "RAW."

After twice per month sampling has been conducted for 24 consecutive months, resulting in forty-eight (48) bacteriological sample results, the TCEQ will evaluate the results and reissue, if appropriate, an exception without an expiration date. Additional monitoring and/or treatment may be required based on the results of the raw water bacteriological samples.

Until notified or directed by the TCEO, the PWS must continue to collect and analyze the twicemonthly raw water samples as required in this letter for as long as Well No. 2 is used as a Mr. Peter T. Gregg Page 5 of 6 January 28, 2021

public water supply well. Please note that at a minimum, a monthly monitoring requirement will remain in effect should an exception without an expiration date be granted following the review of the bacteriological sample results.

For a list of TCEQ-accredited laboratories see our website at:

www.tceq.texas.gov/assets/public/compliance/compliance_support/qa/txnelap_lab_list.pdf

These samples are <u>in addition to</u> the normally required monthly distribution bacteriological samples and must be collected at a point prior to the disinfectant injection point. The sample results should be submitted in the same manner as the results of the monthly distribution bacteriological samples.

If any of the samples yield a positive result, please follow the instructions specified in Enclosure 1: Instructions for Positive Bacteriological Samples.

The PWS must update the system's monitoring plan to reflect the monitoring requirements outlined in this letter. The revised monitoring must be mailed to the TCEQ Monitoring Plan Coordinator at the following address:

Monitoring Plan Coordinator (MC 155) Texas Commission on Environmental Quality P.O. Box 13087 Austin, TX 78711

Additional information is available in TCEQ's Regulatory Guidance No. 384 (RG-384), How to Develop a Monitoring Plan for a Public Water System, or on our website at:

https://www.tceq.texas.gov/drinkingwater/monitoring_plans

All PWS monitoring plans are required to be kept up-to-date and on file at the system at all times and must be presented to TCEQ staff upon request.

Condition 2:

 This exception will expire 36 months from the date of this letter (January 31, 2024).

In support of your exception requests, you provided the following information:

From the submittals received on September 18, 2019 and December 27, 2019:

- A general location map and a detailed site map were provided and shows the area within a 150-foot radius around the well including the property boundaries,
- A copy of the State of Texas Well Report for Tracking #481316 for Well No. 2.
- The certified mail receipts for correspondence sent to three (3) owners were provided for properties where SCEs could not be obtained. We note: According to the delivery details available on the United States Postal Service website, the package mailed to Marcos & Maria Cortez was returned to the sender (WaterEngineers, Inc.) because the addressee was not known at place of address and no change-of-address order was on file and the package mailed to Troy & Tanya Monson was also returned to the sender (WaterEngineers, Inc.) because the addressee abandoned or failed to call for mail. The TCEQ determined the attempt to correspond with the owners is sufficient, and
- A statement that sanitary hazards prohibited are not located within a 0.25-mile radius
 of Well No. 1 with the exception of the named hazards discussed earlier in this letter.
 We note: the submittal included a copy of the TCEQ.

Mr. Peter T. Gregg Page 6 of 6 January 28, 2021

A copy of this letter and all related monitoring data must be maintained with the water system's records for as long as these exceptions are in effect. These records must be made available to TCEQ staff upon request. If contamination of a well occurs which is not remediated through treatment, a new properly constructed well may be required at another location and abandonment, proper plugging, and sealing of the abandoned well will be required.

All exceptions are subject to review. If new information indicates that these exceptions compromise the public health or degrades service or water quality, the exceptions may be revoked as specified in 30 TAC §290.39(l)(2). Noncompliance with any condition stated in this exception letter may result in enforcement action as specified in 30 TAC §290.39(l)(5). These exceptions are not intended to waive compliance with any other TCEQ requirement in 30 TAC Chapter 290. These exceptions cannot be used as a defense in any enforcement action resulting from noncompliance with any other requirement of 30 TAC Chapter 290.

If you have questions concerning this letter, or if we can be of additional assistance, please contact Ms. Erin Guerra, P.E. by email at Erin.Guerra@tceq.texas.gov, by telephone at (512) 239-4787, or by correspondence at the following address:

Technical Review and Oversight Team (MC 159) Texas Commission on Environmental Quality P.O. Box 13087 Austin, Texas 78711-3087

Sincerely.

Stephanie Escobar, Team Leader Technical Review and Oversight Team

Plan and Technical Review Section

Stephanic Escobar

Water Supply Division

Texas Commission on Environmental Quality

SJE/erg/db

Enclosure 1: Instructions for Positive Bacteriological Samples

Mr. Ronald L. Payne, President, T & W Water Service Company, P.O. Box 2927, Conroe, TX 77305-2927

Mr. Paul Baudat, Operator, T & W Water Service Company, P.O. Box 2927, Conroe, TX 77305-2927

Ms. Deanna Degeyter, T & W Water Service Company, P.O. Box 2927, Conroe, TX 77305-2927

Instructions for Positive Bacteriological Samples

If multiple raw water samples are found to be **positive** for total coliform and **negative** for *E. coli* and other fecal indicators, a new exception with revised conditions may be required. TCEQ personnel recommend reviewing the sample collection protocol to ensure proper sample collection methods are in place. Personnel also recommend well disinfection according to American Water Works Association (AWWA) well disinfection standards.

If a raw water sample is found to be positive for total coliform and positive for *E. coli* or other fecal indicators, Ground Water Rule requirements include:

- A. Issuance of a Public Notice to water system customers in accordance with 30 TAC §290.122(a) within 24 hours of being notified of the positive result.
- B. Notification to all consecutive systems served by the well within 24 hours of being notified of the positive result.
- C. Notification to TCEQ Drinking Water Assessment Team personnel at 512-239-4691 or GWRdata@tceq.texas.gov within 24 hours of being notified of the positive result.
- D. Implementation of one or more of the Corrective Actions described in 30 TAC §290.116 as indicated by TCEQ Drinking Water Assessment Team personnel.

Additionally, the current exception may be revoked and a new exception with revised conditions may be required

Information on the Ground Water Rule can be found by calling 512-239-4691 and asking to speak to a member of the Drinking Water Assessment Team or at the following website:

http://www.tceq.texas.gov/drinkingwater/microbial/gwr_main.html

Bryan W. Shaw, Pt. D., P.E., Chairman Toby Baker, Commissioner Zak Covar, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 28, 2014

Mr. Thomas L. Baudat, President T&W Water Service Company PO Box 2927 Conroe, Texas 77305- 2927

Re: Comprehensive Compliance Investigation at:

Grand Harbor W.S., 18984 Ocean Mist Ct., Montgomery County, Texas

Regulated Entity No.: 101179513

TCEQ ID No.: 1700643 Investigation No.: 1163694

Dear Mr. Baudat:

On March 28, 2014, Ms. Elaine Jackson of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted an investigation of the above-referenced facility to evaluate compliance with the applicable requirements for public water supply systems. No violations are being alleged as a result of the investigation; however, please see the attached Additional Issue. In addition, please be advised that a violation could be issued upon further review of your system's records or self-reported documentation.

The TCEQ appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact Ms. Elaine Jackson in the Houston Region Office at (713)767-3650.

Sincerely

Leticia De Leon, Team Leader

Public Water Supply Houston Region Office

LD/ej/kc

cc: Montgomery County Environmental Health Services

Enclosure: Summary of Findings

Summary of Investigation Findings

GRAND HARBOR WATER SYSTEM

Investigation #

1163694 Investigation Date: 03/28/2014

, MONTGOMERY COUNTY.

Additional ID(s): 1700643

ALLEGED VIOLATION(S) NOTED AND RESOLVED

Track No: 374881

30 TAC Chapter 290.44(d) 30 TAC Chapter 290.46(r)

Alleged Violation:

Investigation: 767702

Comment Date: 08/27/2009

Failure to design and maintain a water distribution system to provide at all points within the distribution network a minimum pressure of 35 pounds per square inch (psi) at flow rates of at least 1.5 gallons per minute per connection at each service outlet or connection. When the regulated entity is intended to provide fire fighting capability, it must also be designed to maintain a minimum pressure of 20 psi under combined fire and drinking water flow conditions.

Investigation: 1163694 Comment Date: 05/20/2014

Failure to design and maintain a water distribution system to provide at all points within the distribution network a minimum pressure of 35 pounds per square inch (psi) at flow rates of at least 1.5 gallons per minute per connection at each service outlet or connection. When the regulated entity is intended to provide fire fighting capability, it must also be designed to maintain a minimum pressure of 20 psi under combined fire and drinking water flow conditions.

Recommended Corrective Action: Submit photo, work order, receipt to verify complinace.

Resolution: On March 28, 2014, the investigator observed that the pressure in the distribution system was 70 pounds per square inch (psi).

ADDITIONAL ISSUES

Description Item 2

Additional Comments

Certificate of Convenience and Necessity

Failure, by a retail public utility that possesses a certificate of public convenience and necessity that has reached 85% of its capacity as compared to the most restrictive criteria of the commission's minimum capacity requirements in Chapter 290 T.A.C., to submit to the executive director a planning report that clearly explains how the retail public utility will provide the expected service demands to the remaining areas within the boundaries of its certificated area. The pressure tank capacity has reach 98 % of its capacity.

Compliance Documentation: Submit a planning report within 90 days.

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Zak Covar, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 6, 2014

Mr. Thomas L. Baudat, President T&W Water Service Company PO Box 2927 Conroe, Texas 77305- 2927

Re: Comprehensive Compliance Investigation at:

Harborside, 18824 Harborside, Montgomery County, Texas

Regulated Entity No.: 101224806

TCEQ ID No.: 1700682, Investigation No.: 1163688

Dear Mr. Baudat:

On March 28, 2014, Ms. Elaine Jackson of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted an investigation of the above-referenced facility to evaluate compliance with the applicable requirements for public water supply systems. No violations are being alleged as a result of the investigation; however, please see the attached Additional Issue. In addition, please be advised that a violation could be issued upon further review of your system's records or self-reported documentation.

The TCEQ appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact Ms. Elaine Jackson in the Houston Region Office at (713)767-3650.

Sincerely.

Leticia De Leon, Team Leader

Public Water Supply Houston Region Office

LD/ej/kc

cc: Montgomery County Environmental Health Services

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Jon Niermann, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Poliution

June 16, 2017

Mr. Ron Payne, General Manager **T&W Water Service Company** PO Box 2927 Conroe, Texas 77305-2927

Comprehensive Compliance Investigation at:

Hydies Crossing, 5606 Rhetta Ln, Spring, Harris County, Texas Regulated Entity No.: 101209625, TCEQ ID No.: 1013180, Investigation No.: 1410235

Dear Mr. Payne:

On May 2, 2017, Mr. David W. Livings, R.S. of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted an investigation of the above-referenced facility to evaluate compliance with the applicable requirements for public water supply systems. No violations are being alleged as a result of the investigation. In addition, please be advised that a violation could be issued upon further review of your system's records or self-reported documentation.

The TCEQ appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact Mr. David W. Livings, R.S.in the Houston Region Office at (713) 767-3650.

Sincerely,

Julia Thorp, Team Leader **Public Water Supply**

Houston Region Office

JT/DW/db

Harris County Public Health and Environmental Services

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Zak Covar, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 1, 2014

Mr. Ronald L. Payne, President T & W Water Service Company PO Box 2927 Conroe, Texas 77305-2927

Re: Comprehensive Compliance Investigation at:

Miller's Crossing, 9030 Miller Road, Conroe, Montgomery County, Texas Regulated Entity No.101274702, TCEQ ID No.1700675, Investigation No. 1204666

Dear Mr. Payne:

On October 30, 2014, Ms. Patricia Blackwell of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted an investigation of the above-referenced facility to evaluate compliance with the applicable requirements for public water supply systems. No violations are being alleged as a result of the investigation. In addition, please be advised that a violation could be issued upon further review of your system's records or self-reported documentation.

The TCEQ appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact Ms. Patricia Blackwell in the Houston Region Office at (713) 767-3650.

Sincerely,

Leticia De Leon, Team Leader

Public Water Supply Houston Region Office

LD/PB/ra

cc: Montgomery County Environmental Health Services

Jon Niermann, Chairman Emily Lindley, Commissioner Toby Baker, Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Poliution

March 27, 2019

Mr. Ronald L. Payne President T & W Water Service Company Post Office Box 2927 Conroe, Texas 77305-2927

Re:

Comprehensive Compliance Investigation at:

Oaks of Trinity Subdivision, 1/2 Miles South of Kenefick on Highway 1008, Dayton,

Liberty County, Texas

Regulated Entity No.: 101246007

TCEQ ID No.: 1460156

Investigation No.: 1540910

Dear Mr. Payne:

On January 31, 2019, Mr. Charlie Thomas of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted an investigation of the above-referenced facility to evaluate compliance with the applicable requirements for public water supply systems. No violations are being alleged as a result of the investigation. In addition, please be advised that a violation could be issued upon further review of your system's records or self-reported documentation.

The TCEQ appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact Mr. Thomas in the Houston Region Office at (713) 767-3569.

Sincerely.

Latrichia Spikes Team Leader

Public Water Supply Houston Region Office

LS/CT/sh

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Zak Covar, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 14, 2014

Mr. Ronald L. Payne, President T & W Water Service Company PO Box 2927 Conroe, TX 77305-2927

Re: Comprehensive Compliance Investigation at:

Old Mill Lake, 1400 Fishers Cove, Montgomery County, Texas

Regulated Entity No.:101281012

TCEQ ID No.: 1700662 Investigation No.: 1171227

Dear Mr. Payne:

On May 28, 2014, Ms. Maggie Wright of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted an investigation of the above-referenced facility to evaluate compliance with the applicable requirements for public water supply systems. No violations are being alleged as a result of the investigation; however, please see the attached Area of Concern. In addition, please be advised that a violation could be issued upon further review of your system's records or self-reported documentation.

The TCEQ appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact Ms. Maggie Wright in the Houston Region Office at (713)767-3650.

Sincerely.

Leticia De Leon, Team Leader

Public Water Supply Houston Region Office

LD/mw/kc

cc: Montgomery County Environmental Health Services

Enclosure: Summary of Findings

Sum...ary of Investigation Findings

OLD MILL LAKE

Investigation #

1171227 Investigation Date: 05/28/2014

, MONTGOMERY COUNTY,

Additional ID(s): 1700662

AREA OF CONCERN

Track No: 537669

30 TAC Chapter 290.46(s)(1)

Alleged Violation:

Investigation: 1171227

Comment Date: 06/06/2014

Testing Equipment

Failure to calibrate the well meter as required by 30 TAC §290.41(c)(3)(N) according to the manufacturer's specifications at least once every three years.

At the time of the investigation, no calibration report on the flow meter was provided.

Recommended Corrective Action: Submit a copy of the calibration report on the well flow meter to verify complaince.

Resolution: A copy of the calibration report on the flow meter was submitted by email on 05/28/2014.

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Zak Covar, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 26, 2015

Mr. Ronald L. Payne, General Manager T & W Water Service Company P.O. Box 2927 Conroe, Texas 77305-2927

Re: Notice of Compliance with Notice of Violation (NOV) dated September 29, 2014
Rio Vista Subdivision, 17206 Pecos Drive, Splendora, Montgomery County, Texas
Regulated Entity No.: 105347751, TCEQ ID No.: 1700778, Investigation No.: 1215290

Dear Mr. Payne:

On October 17, 2014, the Texas Commission on Environmental Quality (TCEQ) Houston Region Office received adequate compliance documentation to resolve the alleged violations documented during the investigation of the above-referenced regulated entity conducted on July 29, 2014-August 6, 2014. Based on the information submitted, no further action is required concerning this investigation.

The Texas Commission on Environmental Quality appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions, please feel free to contact Ms. LaTrichia Spikes, in the Houston Region Office at (713) 767-3650.

Sincerely.

Leticia De Leon, Team Leader

Public Water Supply Houston Region Office

LD/LS/mar

Enclosure: Summary of Investigation Findings

cc: Montgomery County Environmental Health Services

Summary of Investigation Findings

RIO VISTA SUBDIVISION

Investigation #

1215290 Investigation Date: 12/11/2014

, COUNTY,

Additional ID(s): 1700778

ALLEGED VIOLATION(S) NOTED AND RESOLVED

Track No: 548093

30 TAC Chapter 290.46(s)(1)

Alleged Violation:

Investigation: 1184269

Comment Date: 09/16/2014

Testing Equipment

Failure by the regulated entity to calibrate the well meter required by 30 TAC 290.41(c)(3)(N) according to the manufacturer's specifications at least once every three years.

At the time of the investigation, the regulated entity did not submit a well meter calibration

repoi

Investigation: 1215290 Comment Date: 12/11/2014

Testing Equipment

Failure by the regulated entity to calibrate the well meter required by 30 TAC 290.41(c)(3)(N) according to the manufacturer's specifications at least once every three years.

At the time of the investigation, the regulated entity did not submit a well meter calibration report.

Recommended Corrective Action: Submit the well meter calibration report to verify compliance.

Resolution: On October 17, 2014 the regulated entity submitted a copy of the well meter calibration.

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Jon Niermann, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 24, 2016

Thomas L. Baudat, P.E., President T & W Water Service Company PO Box 2927 Conroe, Texas 77305-2927

Re: Comprehensive Compliance Investigation at:

Riverwalk Subdivision, 22789 Colorado Dr., Montgomery County, Texas

Regulated Entity No.: 101241677

TCEQ ID No.: 1700604 Investigation No.: 1344204

Dear Mr. Baudat:

On June 15, 2016, Ms. Melody Kirksey, of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted an investigation of the above-referenced facility to evaluate compliance with the applicable requirements for public water supply systems. No violations are being alleged as a result of the investigation. In addition, please be advised that a violation could be issued upon further review of your system's records or self-reported documentation.

The TCEQ appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact Ms. Kirksey, in the Houston Region Office at (713) 767-3650.

Sincerely

JUJulia Thorp, Team Leader Public Water Supply Houston Region Office

JT/MK/mar

cc: Montgomery County Environmental Health Services

TCEQ EXIT INTERVIEW FORM: Potential Violations and/or Records Request								
Regulated Entity/Site Name	gulated Entity/Site Name Splendora Woods				TCEQ Add. ID No. RN No (optional)	1460153		
Investigation Type	CCI	Contact Made In-House (Y/N)	N	Purpose of Investigation	CCI			
Regulated Entity Contact	Ronald Payne			Telephone No.	936-756-7400	Date Contacted	7/16/2019	
	President		FAX #/Email address		FAX/Email date			

NOTICE: The information provided in this form is intended to provide clarity to issues that have arisen during the investigation process between the TCEQ and the regulated entity named above and does not represent final TCEQ findings related to violations. Any potential or alleged violations discovered after the date on this form will be communicated to the regulated entity representative prior to the issuance of a notice of violation or enforcement. Conclusions drawn from this investigation, including additional violations or potential violations discovered (if any) during the course of this investigation, will be documented in a final investigation-report.

Issue		For Records Request, identify the necessary records, the company contact and date due to the agency. For Alleged and Potential Violation issues, include the rule in question with the clearly described potential problem. Other type of issues: fully describe.					
No.	Type ¹	Rule Citation (if known)	Description of Issue				
1	AV	290.46(p)(2)	Failure to provide the executive director with a written list on an annual basis of all the operators and operating companies that the public water system employs. During the investigation, it was noted that the water system had not submitted a list to the executive director of all operators employed by Splendora Woods. Fill out the certified operators list and submit a copy to the Executive Director and a copy to the Beaumont Regional Office.				
2	AV	290.42(I)	Failure to have an adequate plant operation manual. During the investigation, was noted that the plant operations manual was incomplete. The manual did not include emergency protocols for man-made and natural disasters, federal, local and state contact information. Update the plant operations manual to include emergency protocols for man-made and natural disasters, federal, local and state contact information and submit a copy to the Beaumont Regional Office.				
3	AV	290.46(n)(2)	Failure to have a complete distribution map. During the investigation, it was noted that the water system could not provide a complete distribution map. The president stated that they believed the water lines were looped and did not end in dead ends; however, the map did not display this at the following locations: 97 CR 3794, 2930 CR 2790, and 518 CR 379. Update the map and submit copy of the updated sections to the Beaumont Regional Office.				
4	AV	290.46(i)	Failure to adopt an adequate customer service agreement. During the investigation, it was noted that the water system did not adopt an adequate customer service agreement permitted in 290.47(b). It was noted that the customer service agreement did not include an enforcement clause and did not include restrictions for the use of pipes and pipe fittings that contain more than 0.25% lead or solders and flux that contain more than 0.2% lead. Update the customer service agreement and submit a signed copy to the Beaumont Regional Office.				
5	PV		Please find out if the gas station connected to the water system has a carbonated drink dispenser. If the gas station does have a carbonated drink dispenser without a testable RPBA installed at the meter or behind the machine, install a RPBA and submit the assembly test to the Beaumont Regional Office.				

6	AV	290.121(b)(1)	Failure to have a complete monitoring plan. During the investigation, it was noted that the monitoring plan was incomplete the lead and copper section did not have compliance calculations, sample sites, and methods included in the section. Update this section of the monitoring plan and submit a copy to the Beaumont Regional Office. It was also noted that the schematic did not include Well No. 2, the orthophosphate blends chemical injection point, and the second ground storage tank. please note that the president updated this section during the investigation.
7	AV	290.42(f)(1)(E)(ii)	Failure to have secondary containment structures for chemical storage facilities at the plant. During the investigation, it was noted that secondary containment structures were not in place for the 150-gallon hypochlorite solution bulk tank and the 130-gallon orthophosphate blend bulk tank. Install secondary containment for the 150-gallon hypochlorite solution bulk tank and the 130-gallon orthophosphate blend bulk tank and submit photographic documentation to the Beaumont Regional Office.
8	AV	290.42(b)(7)	Failure to have the air release device on Well No. 1 and Well No. 2 covered with 16-mesh or finer corrosion-resistant screening material or an equivalent acceptable to the executive director. During the investigation, it was noted that the air release device on Well No. 1 and 2 did not have 16- mesh or finer corrosion-resistant screening material covering the opening to the atmosphere. Install 16 – mesh screening or finer on the air release devices on Well No. 1 and Well No. 2.
9	AV	290.46(t)	Failure to post an ownership sign at the plant. During the investigation, it was noted that no ownership sign was posted at the plant. Post the ownership sign at the plant and submit photographic documentation to the Beaumont Regional Office.
10	AV	290.43(c)(2)	Failure to have the ground storage tank roof openings designed in accordance with AWWA standards. During the investigation, it was noted that the roof openings of both of the ground storage tanks were only estimated about 18 inches in diameter. Obtain an exception to the rule for the roof hatch opening being less than 30 inches in diameter or when repair or maintenance is performed on the tank the access opening shell be modified to meet the requirements of AWWA standards. When this occurs send photographic documentation to the Beaumont Regional Office.
11	AV	290.46(m)	Failure to maintain the pressure tank, both ground storage tanks, and Well No. 1 sealing block in a good condition and appearance. During the investigation, a significant amount of mildew and potential paint peeling was noted on the pressure tank and both ground storage tanks. Pressure wash the tanks and submit photographic documentation to the Beaumont Regional Office. During the investigation, it was also noted that the sealing block for Well No. 1 has cracked and falling apart a new sealing block will need to be installing to prevent potential contamination of the well. Install new concrete around the well and submit photographic documentation to the Beaumont Regional Office.
12	AV		Failure to maintain plant equipment tight against leakage. During the investigation, it was noted that service pump no. 2 had a leak. Repair the leak and submit photograph documentation to the Beaumont Regional Office.
	- I		

Note 1: Issue Type Can Be One or More of: AV (Alleged Violation), PV (Potential Violation), O (Other), or RR (Records Request)

ed operation is	s not authorized?	☐ Yes			
Did the investigator advise the regulated entity representative that continued operation is not authorized?					
		of this document and associ	ciated continua	tion pages on th	e date noted. If
/16/2019					
Date	Regulated Entity Representative Name (Signed & Printed)			Date	
•	e, the RE signati 16/2019	e, the RÉ signature is not required.	e, the RE signature is not required. 16/2019	e, the RE signature is not required. 16/2019	16/2019

If you have questions about any information on this form, please contact your local TCEQ Regional Office.

Shelley Young

From: Ronald L Payne <ron@ripcontroller.com>
Sent: Wednesday, April 01, 2020 2:24 PM
To: syoung@waterengineers.com

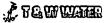
To: syoung@waterengineers.com
Subject: FW: TCEQ Exit Interview Form

Attachments: 11883-10805 Fostoria Rd - Item #5.pdf; Customer Service Agreement - Item #4.pdf;

Operator Notice Form - Splendora Woods Item # 1.pdf; Splendora Woods - Monitoring Plan - Item #6.doc; Splendora Woods - Operations & Maintenance Manual - Item # 2.docx; Splendora Woods Containment Tanks - Item#7.jpeg; Splendora Woods Email to Engineer - Item #10.pdf; Splendora Woods GST & HYdro Tank - Item #11.jpg; Splendora Woods Hydro Tank - Item #8.jpeg; Splendora Woods New Booster Pump - Item # 12.jpeg; Splendora Woods Sign - Item #9.jpeg; Splendora Woods Well #1 - Item #8.jpeg; Splendora Woods Well #2 - Item #8.jpeg; Splendora Woods Well Slab - Item #11.jpg

Responses

Thanks, Ron Payne General Manager



12284 FM 3083 Conroe, TX 77301

Office: 936-756-7400 | Cell: 281-639-9358

From: Ronald L Payne <ron@rlpcontroller.com>

Sent: Monday, July 29, 2019 12:39 PM

To: Marissa Peltier < Marissa. Peltier@tceq.texas.gov>

Subject: RE: TCEQ Exit Interview Form

Marissa: I have attached photos & documents to show the corrective actions T&W has completed on the exit interview.

Item 1 - Attached a copy of the Operators Notice Form which was filed with the TCEQ in Austin.

Item 2 - New operations Manual is attached.

Item 3 – We are working on the updated map & flushing log. Will send to you asap.

Item 4 - New agreement is attached.

Item 5 - Letter to gas station is attached.

Item 6 - New Monitoring is attached.

Item 7 - Photo is attached.

Item 8 - Photo is attached.

Item 9 - Photo is attached.

Item 10 - Email to engineer is attached.

Item 11 - Photo is attached.

Item 12 - Photo is attached.

Please let me know if you have any questions or need additional information.

Thanks,

Ron Payne President



Office: 936-756-7400 | Fax: 866-422-8519

From: Marissa Peltier < Marissa. Peltier @tceq.texas.gov >

Sent: Tuesday, July 16, 2019 4:43 PM
To: Ronald L Payne < ron@rlpcontroller.com>

Subject: TCEQ Exit Interview Form

Hey Ron,

I have attached the exit interview form for todays inspection. If you have any documentation that you would like included in the report, you can submit it via email within 14 days or shortly thereafter. Let me know if you have any questions. I will be out of the office July 22-26, 2019 so you can hold your questions until I return July 29, 2019 or you can ask Paige.

Thank you,

Marissa Peltier

Environmental Investigator, Drinking Water TCEQ Region 10 (Beaumont)



Texas Commission on Environmental Quality 3870 Eastex Freeway, Beaumont, TX 77703 Office: 409-898-3838 / Fax: 409-899-8778 marissa.peltier@tceq.texas.gov

How are we doing? Comment on our service.

Jon Niermann, Chairman
Emily Lindley, Commissioner
Toby Baker, Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 5, 2019

CERTIFIED MAIL (7015 0640 0004 7938 7131)
RETURN RECEIPT REQUESTED

Mr. Ronald Payne, President T & W Water Service Company PO Box 2927 Conroe, Texas 77305

Re: Notice of Violation for Public Water Supply Comprehensive Compliance Investigation at: Spring Oaks Subdivision, Cleveland (Liberty County), Texas; Regulated Entity No.: RN101235166, PWS ID No.: 1460157, Investigation No.: 1580002

Dear Mr. Payne:

On July 16, 2019, Marissa Peltier and Paige Pritchard of the Texas Commission on Environmental Quality (TCEQ) Beaumont Region 10 Office conducted an investigation of the above-referenced regulated entity to evaluate compliance with applicable requirements for public water supply. Enclosed is a summary which lists the investigation findings. During the investigation, some concerns were noted which were alleged noncompliances that have been resolved Areas of Concern based on subsequent corrective action. Based on the information you have provided, the TCEQ has adequate documentation to resolve the alleged violations. Therefore, no further action is required.

In the listing of the alleged violations, we have cited applicable requirements, including TCEQ rules. Please note that both the rules themselves and the agency brochure entitled Obtaining TCEQ Rules (GI 032) are located on our agency website at http://www.tceq.state.tx.us for your reference. If you would like a hard copy of this brochure mailed to you, you may call and request one from either the Beaumont Region 10 Office at 409-898-3838 or the Central Office Publications Ordering Team at 512-239-0028.

The TCEQ appreciates your assistance in this matter. Please note that the Legislature has granted TCEQ enforcement powers which we may exercise to ensure compliance with environmental regulatory requirements. We anticipate that you will resolve the alleged violations as required in order to protect the State's environment. If you have additional information that we are unaware of, you have the opportunity to contest the violations documented in this notice. Should you choose to do so, you must notify the Beaumont Region 10 Office within 10 days from the date of this letter. At that time, Ronald Hebert, Water Section Manager, will schedule a violation review meeting to be conducted within 21 days from the date of this letter.

However, please be advised that if you decide to participate in the violation review process, the TCEQ may still require you to adhere to the compliance schedule included in the enclosed Summary of Investigation Findings until an official decision is made regarding the status of any or all of the contested violations.

TCEQ Region 10 • 3870 Eastex Fwy. • Beaumont, Texas 77703-1830 • 409-898-3838 • Fax 409-892-2119

Austin Headquarters: 512-239-1000 • tceq.texas.gov • How is our customer service? tceq.texas.gov/customersurvey

Mr. Ronald Payne, President Page 2 September 5, 2019

If you or members of your staff have any questions, please feel free to contact Ms. Peltier in the Beaumont Region 10 Office at 409-898-3838.

Sincerely,

Ronald Hebert, Water Section Manager Beaumont Region 10 Office Texas Commission on Environmental Quality

RH/MP/cal

Enclosure: Summary of Investigation Findings

Summary of Investigation Findings

SPRING OAKS SUBDIVISION

Investigation #

278 COUNTY ROAD 2800

1580002 Investigation Date: 07/16/2019

CLEVELAND, LIBERTY COUNTY, TX 77327

Additional ID(s): 1460157

ALLEGED VIOLATION(S) NOTED AND RESOLVED ASSOCIATED TO A NOTICE OF VIOLATION

Track No: 726672

30 TAC Chapter 290.41(c)(3)(Q)

Alleged Violation:

Investigation: 1580002

Comment Date: 08/29/2019

Failure by T&W Water Service Company- Spring Oaks Subdivision to have an air release device covered with 16-mesh or finer.

During the investigation, it was noted that the well air release device did not have 16-mesh screening or finer covering the opening to the atmosphere. Please note this violation is considered a Significant deficiency and could be subject to 40 Code of Federal Regulations (CFR) Subpart S-Groundwater Rule regarding significant deficiencies if not corrected or part of a state approved corrective action plan by the violation deadline.

Recommended Corrective Action: Install 16-mesh screening or finer on the well air release device.

Resolution: On August 15, 2019, the Beaumont Regional Office received a photograph documenting that 16-mesh screening had been installed covering the opening to the atmosphere on the well air release device.

Track No: 726675

30 TAC Chapter 290.42(b)(7)

Alleged Violation:

Investigation: 1580002

Comment Date: 08/29/2019

Failure by T&W Water Service Company- Spring Oaks Subdivision to have an air release device covered with 16-mesh or finer.

During the investigation, it was noted that the 5,000-gallon pressure tank air release device did not have 16-mesh screening or finer covering the opening to the atmosphere. Please note this violation is considered a Significant deficiency and could be subject to 40 Code of Federal Regulations (CFR) Subpart S-Groundwater Rule regarding significant deficiencies if not corrected or part of a state approved corrective action plan by the violation deadline.

Recommended Corrective Action: Install 16-mesh screening or finer on the pressure tank air release device.

Resolution: On August 15, 2019, the Beaumont Regional Office received a photograph documenting that 16-mesh screening had been installed covering the opening to the atmosphere on the pressure tank air release device.

AREA OF CONCERN

Track No: 726666

30 TAC Chapter 290.46(p)(2)

Alleged Violation:

Summary of Investigation Findings

Page 1 of 4

investigation # 1580002

Investigation: 1580002

Comment Date: 08/29/2019

Failure by T&W Water Service Company- Spring Oaks Subdivision to submit a list of all operators employed by the water system to the executive director on an annual basis.

During the investigation, it was noted that the water system has not provided a list of operators employed by the water system to the executive director on an annual basis,

Recommended Corrective Action: Complete a written list of all operators or operating companies employed by the water system and send to the executive director.

Resolution: On July 29, 2019 the Beaumont Regional Office received a copy of a complete Operator Notice Form.

Track No: 726667

30 TAC Chapter 290.42(I)

Alleged Violation:

Investigation: 1580002

Comment Date: 08/29/2019

Failure by T&W Water Service Company- Spring Oaks Subdivision to have an adequate Plant Operations and Maintenance Manual.

During the investigation, it was noted that the water system did not have an adequate Plant Operations and Maintenance Manual. The manual did not include contact information for local, state, and federal regulating entities or emergency protocols for natural and man-made disasters.

Recommended Corrective Action: Update the Plant Operations and Maintenance Manual to include emergency contact information for the local, state, and federal regulating entities and emergency protocols for natural and man-made disasters.

Resolution: On August 15, 2019, the Beaumont Regional Office an updated Plant Operations and Maintenance Manual that included the appropriate emergency contact information and emergency protocols for natural and man-made disasters.

Track No: 726668

30 TAC Chapter 290.46(i)

Alleged Violation:

Investigation: 1580002

Comment Date: 08/29/2019

Failure by T&W Water Service Company- Spring Oaks Subdivision to adopt an adequate plumbing ordinance, regulation, or service agreement.

During the investigation, it was noted that the water system's Customer Service Agreement was lacking an enforcement clause and lead limits for pipes, pipe fittings, solder and flux.

Recommended Corrective Action: Update the Customer Service Agreement to include an enforcement clause and lead limits for pipes, pipe fittings, solder and flux.

Resolution: On July 29, 2019, the Beaumont Regional Office received an updated Customer Service Agreement which included an enforcement clause and appropriate lead limits for pipes, pipe fittings, solder and flux.

Track No: 726669

30 TAC Chapter 290.46(I)

Alleged Violation:

Investigation: 1580002

Comment Date: 08/29/2019

Failure by T&W Water Service Company-Spring Oaks Subdivision to flush all dead-end mains on a monthly basis.

During the investigation, it was noted that the water system has failed to flush all dead-end

Summary of Investigation Findings

Page 2 of 4

SPRING OAKS SUBDIVISION

Investigation # 1580002

mains on a monthly basis. It was noted that the flushing log did not include CR 2802, which was verified by the water system to be a dead-end main line, until March 2019. The line has been flushed monthly since March 2019.

Recommended Corrective Action: Update the monthly flushing log to include CR 2802.

Resolution: During the investigation, the investigators noted that the water system has been adequately flushing the dead-end main at CR 2802 since March 2019.

Track No: 726671

30 TAC Chapter 290.121(b)

Alleged Violation:

Investigation: 1580002

Comment Date: 08/29/2019

Failure by T&W Water Service Company- Spring Oaks Subdivision to have a complete monitoring plan.

During the investigation, it was noted that the monitoring plan was lacking the following in the lead and copper section: sample sites, methods, and compliance calculations.

Recommended Corrective Action: Update the monitoring plan to include the sample sites, methods, and compliance calculations for the lead and copper section.

Resolution: On August 15, 2019, the Beaumont Regional Office received a copy of the updated monitoring plan that included the sample sites, methods, and compliance calculations for the lead and copper section.

Track No: 726673

30 TAC Chapter 290.46(m)

Alleged Violation:

Investigation: 1580002

Comment Date: 08/29/2019

Fallure by T&W Water Service Company- Spring Oaks Subdivision to perform maintenance and housekeeping practices used by a public water system to ensure the good working condition and general appearance of the system's facilities and equipment.

During the investigation, it was noted that the sealing block of the well had two large cracks. Recommended Corrective Action: Repair the sealing block of the well.

Resolution: On July 29, 2019, the Beaumont Regional Office received a photograph documenting that the cracks had been repaired by filling them with concrete.

Track No: 726674

30 TAC Chapter 290,46(m)

Alleged Violation:

Investigation: 1580002

Comment Date: 08/29/2019

Failure by T&W Water Service Company- Spring Oaks Subdivision to perform maintenance and housekeeping practices used by a public water system to ensure the good working condition and general appearance of the system's facilities and equipment.

During the investigation, it was noted that the 21,591-gallon ground storage tank and 5,000-gallon pressure tank needed to be cleaned of mildew.

Recommended Corrective Action: Clean the ground storage tank and pressure tank of mildew.

Resolution: On July 29, 2019, the Beaumont Regional Office received photographs documenting that the 21,591-gallon ground storage tank and 5,000-gallon pressure tank had been cleaned of mildew.

ADDITIONALISSUES

Summary of Investigation Findings

Page 3 of 4

Description Item #10

Additional Comments

During the investigation, it was noted that the water system was operating at 87.1% total storage capacity. A retail public utility that possesses a certificate of public convenience and necessity that has reached 85% of its capacity as compared to most restrictive criteria of the commission's minimum capacity requirements in 30 TAC Chapter 290 shall submit to the executive director, a planning report that clearly explains how the retail public utility will provide the expected service demands to the remaining areas within the boundaries of its certified area.

The report should be submitted in writing and should contain the following:
(i) a brief description of the overall utility system and service area
(ii) an analysis of the plant capacity
(iii) details on how the retail public utility will provide service to the remaining areas within the boundaries of its certificated area. This includes projections of cost and expected design and installation dates for additional facilities.

Please submit a detailed planning report to the Beaumont Regional Office within 90 days.

⋙WATERENGINEERS, INC.

WATER & WASTEWATER TREATMENT CONSULTANTS

17230 HUFFMEISTER ROAD, SUITE A ~ CYPRESS, TEXAS 77429-1643

Tel: 281-373-0500 FAX: 281-373-1113

May 18, 2020

Mr. Ronald Herbert TCEQ – Beaumont Regional Office 3870 Eastex Freeway Beaumont, Texas 77703-1830

Re:

Spring Oaks Subdivision Water System - PWS ID: 1460157

Planning Report

RN: 101235166; CN: 601363005; Investigation No.: 1580002

Liberty County, Texas

Dear Mr. Herbert:

Please find herewith the Planning Report and associated attachments for the Spring Oaks Subdivision Water System located in Liberty County.

1. Plan Review Form

Kalena Huut

- 2. TCEQ Correspondence
- 3. Capacity Rating Calculations

If you have any questions or would like further information, I can be reached by telephone at 281-373-0500 or by email at Kalena@waterengineers.com.

WATERENGINEERS, INC. TBPE FIRM No. 2066

Sincerely,

WATERENGINEERS, INC.

Kalena Hewitt, P.E.

Enclosures: As Noted

Ronald Payne via email to ron@twwaterservice.com

Marissa Peltier via email to <u>Marissa.Peltier@TCEQ.Texas.gov</u> Vera Poe, P.E. via email to <u>Vera.Poe@TCEQ.Texas.gov</u> TCEQ Region 12 via email to R12PWS@tceq.texas.gov

SECTION 1

PLANNING REPORT

SPRING OAKS SUBDIVISION WATER SYSTEM PWS: 1460157

OWNER: T & W WATER SERVICES COMPANY 12284 FM 3083 CONROE, TEXAS 77301

PREPARED BY:

Water & Wastewater Treatment Consultants

Water & Wastewater Treatment Consultants
17230 HUFFMEISTER RD., SUITE A TEL: 281-373-0500
CYPRESS, TEXAS 77429 FAX: 281-373-1113

WATERENGINEERS, INC. TBPE FIRM No. 2066

PLANNING REPORT SPRING OAKS SUBDIVISION WATER SYSTEM

1.0 General

T & W Water Services Company (OWNER) owns the existing Spring Oaks Subdivision Water System (PWS 1460157), which is currently supplying water to 94 residential connections in Liberty County, Texas. There is a total of 119 residential lots within the service area. The OWNER has retained WaterEngineers, Inc. to provide planning data regarding the ability to meet the TCEQ requirements related to a water system exceeding 85% capacity.

This report describes the existing and proposed facility ratings and how they meet the most recent revision of the TCEQ Rules and Regulations for Public Water System, TAC 30 Chapter 290 Subchapter D for providing public water supply.

2.0 Minimum Public/Potable Water System Requirements

The Spring Oaks Subdivision Water System currently supplies water to 94 active connections. Water system requirements according to the TCEQ Rules and Regulations for Public Water System, TAC 30 §290.45 (b)(1)(C) were used to calculate the minimum capacity requirements as follows:

- i. Well capacity of 0.6 gpm per connection;
- ii. Total storage capacity of 200 gallons per connection;
- iii. Two or more pumps having a total capacity of 2 gpm per connection; and
- iv. Pressure tank capacity of 20 gallons per connection.

Well Capacity: Storage Tank Capacity:

94 connections * 0.6 gpm/ESFC = 56.4 gpm 94 connections * 200 gpm/ESFC = 18,800 gpm

Booster Pump Capacity: Pressure Tank Capacity:

94 connections * 2.0 gpm/ESFC = 188 gpm 94 connections * 20 gpm/ESFC = 1,880 gpm

The facility ratings for the Spring Oaks Subdivision Water System are included in Section 4.

3.0 Existing Water Plant Facilities

3.1 Water Well

The existing Well No. 1 is a 6-inch steel cased well with a capacity of 202 gpm. The existing well is adequate to serve 337 connections.

3.2 Ground Storage Tank

There is an existing 21,591 gallon ground storage tank located at the water plant site. The existing tank is capable of serving 108 ESFC based on a storage capacity of 200 gallons/ESFC.

A proposed 21,951 gallon fiberglass ground storage tank is to be installed at the water plant site once the service area reaches 108 existing connections. The proposed tank will be capable of serving an additional 108 ESFC, for a total of 216 ESFC based on a storage capacity of 200

1 | Page

gallons/ESFC. Plans and specifications for the proposed ground storage tank will be submitted to the TCEQ's Plant Review Team for approval prior to construction.

3.3 Booster Pumps

There are two existing 5 HP booster pumps at the water plant site. Each 5 HP booster pump has a capacity of 150 gpm at 95 feet TDH. The existing pumps are capable of serving 150 residential connections, based on 2.0 gallons/connection.

3.4 Hydropneumatic Pressure Tank

One 5,000 gallon hydropneumatic tank is installed at the water plant site. This existing hydropneumatic tank is capable of serving 250 residential connections, based on 20 gallons/connection.

4.0 Future Modifications

The only modification currently planned is to install the proposed ground storage tank once the water system reaches 108 connections. Once the ground storage tank is installed the water system with be capable of serving a total of 150 connections.

SECTION 2

- - -

Jon Niermann, Chairman Emily Lindley, Commissioner Toby Baker, Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 5, 2019

CERTIFIED MAIL {7015 0640 0004 7938 7131} RETURN RECEIPT REQUESTED

Mr. Ronald Payne, President T & W Water Service Company PO Box 2927 Conroe, Texas 77305

Re: Notice of Violation for Public Water Supply Comprehensive Compliance Investigation at: Spring Oaks Subdivision, Cleveland (Liberty County), Texas; Regulated Entity No.: RN101235166, PWS ID No.: 1460157, Investigation No.: 1580002

Dear Mr. Payne:

On July 16, 2019, Marissa Peltier and Paige Pritchard of the Texas Commission on Environmental Quality (TCEQ) Beaumont Region 10 Office conducted an investigation of the above-referenced regulated entity to evaluate compliance with applicable requirements for public water supply. Enclosed is a summary which lists the investigation findings. During the investigation, some concerns were noted which were alleged noncompliances that have been resolved Areas of Concern based on subsequent corrective action. Based on the information you have provided, the TCEQ has adequate documentation to resolve the alleged violations. Therefore, no further action is required.

In the listing of the alleged violations, we have cited applicable requirements, including TCEQ rules. Please note that both the rules themselves and the agency brochure entitled *Obtaining TCEQ Rules* (GI 032) are located on our agency website at http://www.tceq.state.tx.us for your reference. If you would like a hard copy of this brochure mailed to you, you may call and request one from either the Beaumont Region 10 Office at 409-898-3838 or the Central Office Publications Ordering Team at 512-239-0028.

The TCEQ appreciates your assistance in this matter. Please note that the Legislature has granted TCEQ enforcement powers which we may exercise to ensure compliance with environmental regulatory requirements. We anticipate that you will resolve the alleged violations as required in order to protect the State's environment. If you have additional information that we are unaware of, you have the opportunity to contest the violations documented in this notice. Should you choose to do so, you must notify the Beaumont Region 10 Office within 10 days from the date of this letter. At that time, Ronald Hebert, Water Section Manager, will schedule a violation review meeting to be conducted within 21 days from the date of this letter.

However, please be advised that if you decide to participate in the violation review process, the TCEQ may still require you to adhere to the compliance schedule included in the enclosed Summary of Investigation Findings until an official decision is made regarding the status of any or all of the contested violations.

TCEQ Region 10 • 3870 Eastex Fwy. • Beaumont, Texas 77703-1830 • 409-898-3838 • Fax 409-892-2119

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Mr. Ronald Payne, President Page 2 September 5, 2019

If you or members of your staff have any questions, please feel free to contact Ms. Peltier in the Beaumont Region 10 Office at 409-898-3838.

Sincerely,

Ronald Hebert, Water Section Manager Beaumont Region 10 Office

Texas Commission on Environmental Quality

RH/MP/cal

Enclosure: Summary of Investigation Findings