



State of Utah

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Environmental Quality

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DIVISION OF DRINKING WATER  
Marie E. Owens, P.E.  
*Director*

December 13, 2019

Robert Tyson Jackson  
Pleasant View City Water System  
520 West Elberta Drive  
Ogden, Utah 84414

Subject: **Exception to R309-540-5(4)(b)&(c) and R309-540-5(4)(b)**, Peak Instantaneous and Peak Day Pressures and Individual Home Booster Pumps, for 5122 North (Lot 1), 5135 North (Lot 2) and 5192 North (Lot 3) Jessie Creek Drive; Pleasant View City, System #29014, File #11262

Dear Mr. Jackson:

On November 26, 2019, the Division of Drinking Water (the Division) received your request for an exception to Rule R309-540-5(4)(b)&(c) and R309-540-5(4)(b) regarding peak instantaneous pressure, peak day pressure and individual home booster pumps, for three (3) new residential connections adjacent to Pleasant View City's Jesse Creek water storage tank. According to these rules, public drinking water systems shall be designed to meet minimum water pressure requirements at points of connection, 30 psi during peak instantaneous demand and 40 psi during peak day demand and individual home booster pumps shall not be allowed for individual service from the public water supply mains.

The land developer is requesting that three lots that are proposed to be adjacent to the City's 800,000-gallon Jesse Creek tank (identified as ST006 in the Division's database) have drinking water service from the City. The tank has a normal low water elevation of 5,515.5 feet and the service laterals for the proposed lots would connect to the transmission line between the tank and the distribution system at an elevation of 5,468 feet. As recently modeled by the City Engineer, the proposed connections would receive water at 20.4 psi during peak instantaneous demand and 20.5 psi during peak day demand.

With this property being partially located within the water system's service area and pressure zone, an individual home booster pump is necessary to provide the required minimum pressures to this residence. It is the City's opinion that granting these exception requests will not jeopardize the public health if installed as shown in the provided design.

The basis for your request for an exception to *R309-540-5(4)(b)&(c)* and *R309-540-5(4)(b)* is that minimum pressures cannot be met due to the close proximity of the Jesse Creek storage tank and the proposed connections. You propose the following measures to provide equivalent protection for public health to meet the intent of the rule:

1. Number and locations of the proposed individual booster pump stations:

The three (3) proposed lots to be served under the requested Rule Exception are located in the proposed Pole Patch Phase 3 subdivision, with addresses of 5122 North (Lot 1), 5135 North (Lot 2) and 5192 North (Lot 3) Jessie Creek Drive, in unincorporated Weber County, Utah.

2. How drinking water quality and public health will be protected:

The meter setters for these services will be equipped with dual check valves to help reduce the potential for backflow into the system.

3. How cross connection hazards will be addressed:

Two (2) of the proposed lot owners (Lots 1 and 2) propose the installation of storage tanks in their homes to receive water from the City system, from which tanks the water will be boosted in their homes solely for domestic purposes. The booster pumps for the homes will be separated from the City system by the in-home storage tanks, which will prevent the potential for a vacuum in the service line due to the booster pump, and also create a pressure-break to prevent unintentional reverse flow into the system.

The third proposed lot owner (Lot 3) proposes installing a duplex booster pump immediately after the meter for its service, adjacent to the City's 10-inch transmission line and boosting into their home. It is undetermined at this time whether the booster system for Lot 3 will incorporate a bladder tank in the home or incorporate the use of variable frequency drives to maintain constant pressure. In addition to the dual check, each pump will be equipped with a non-return valve to prevent unintentional reverse flow into the City system.

4. How will Pleasant View enforce individual booster pumps meeting the requirements of the International Plumbing Code, Section 606.5:

As the plans described above are subject to change, each proposed water booster pump configuration will be reviewed for compliance with IPC 606.5 when the building plans are submitted.

5. Facilitating inspection of the individual home booster pumps by the local plumbing code official:

In conjunction with the Weber County Building Official and Inspectors, the City water department will provide inspections to verify that the booster pump systems are designed and installed per IPC 606.5.

6. Incorporation of individual home booster pumps into Pleasant View's ongoing Cross Connection Control Plan:

By means of Pleasant View City Ordinance Chapter 13.13, all water services become incorporated in Pleasant View City water system's cross connection control (CCC) plan.

7. Access by Pleasant View to inspect the individual home booster pumps:

Pleasant View City Ordinance 13.12.220 states: "The water superintendent and his agents shall at all ordinary hours have free access to any place supplied with water services from municipal system for the purpose of examining the apparatus and ascertaining the amount of water service being used and the manner of its use."

8. Pleasant View standards of operation in place to conduct and scheduled inspections of the individual booster pumps and document the inspection date and results:

Pleasant View City Ordinance 13.13.310.F describes the customer's responsibilities for inspection and testing for all backflow prevention assemblies.

City staff is proposing to amend the above ordinance to read: "It shall be the responsibility of the customer at any premises where backflow prevention assemblies *and/or individual booster pumps* are installed to have certified surveys, inspections, and operational tests made at least once per year at the customer's expense...."

9. Legal notice attached to a title or deed of a property with an individual home booster pump stating that an individual home booster pump is present and Pleasant View City shall have access to inspect it:

A note will be required on the plat for approval of this subdivision. Such a note will satisfy the intent of this requirement, because the plat is the "safest" place to keep such a note.

Additionally, the City will file a notice on each lot upon recordation alerting to the presence of individual home booster pump with reference to the Pleasant View City Ordinances.

On this basis, ***R309-540-5(4)(b)&(c), and R309-540-5(4)(b)***, **Peak Instantaneous and Peak Day Pressures and Individual Home Booster Pumps, is hereby granted for Lots 1, 2 and 3 near Jesse Creak storage tank (ST006).**

Please maintain a copy of this letter with your permanent records for future reference.

Robert Tyson Jackson  
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If you have any questions regarding this letter, please contact Camron Harry, of this office, at (385) 270-7272, or Nathan Lunstad, Engineering Manager, at (385) 239-5974.

Sincerely,



Ying-Ying Macauley, M.S., P.E.  
Assistant Director

CH/nl/mdb

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