ORDER NO. 04-146

ENTERED MAR 15 2004

BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

UCB 10

In the Matter of LARRY'S EQUIPMENT REPAIR,	)	ORDER
Complainant,	)	
vs.	)	
PARKDALE WATER COMPANY,	)	
Defendant.	)	

DISPOSITION: COMPLAINT DENIED

On March 11, 2003, Larry Hoffmann on behalf of Larry's Equipment Repair filed this complaint against Parkdale Water Company (Parkdale). Parkdale replied on March 25, 2003, and correspondence was exchanged over the next few months. A prehearing conference was held on April 11, 2003, and a hearing was held in the matter on September 24, 2003. Ronald Phillips appeared for Parkdale, and Larry Hoffmann appeared for the complainant. Stephanie Andrus, Assistant Attorney General, represented Public Utility Commission Staff (Staff).

The Complaint

Mr. Hoffmann complained that he was overcharged for the meter, valves, and pipe in his service connection. On March 18, 1997, Mr. Hoffmann signed an application for water service acknowledging a service connection fee of $1000 to cover the cost of "Labor and Materials to install all required Meters, Valves and Pipe to and on your property nearest to the main line." Mr. Hoffmann asserts that the $1000 charge covers the meter and is not supported by actual costs. He attached similar applications from two other customers.

Mr. Hoffmann also argues that a backflow prevention device was improperly installed at his service connection. He states "Parkdale Water Company's Cross-Connection Control Policy does not require customers that have no cross-connection hazard to install a backflow prevention device." He contests Parkdale calling the policy an "ordinance" and asserts that a permit must be issued to install a backflow device and thermal expansion device. He also challenges installation of the backflow prevention device because he now has a thermal expansion hazard in violation of the Oregon plumbing code.

Parkdale responded by noting that the current rule limiting the service connection fee to $300 was not in effect when the service connection to Larry's Equipment Repair was installed. Instead, a rule was in effect that allowed a utility to charge a customer "a reasonable service connection charge." Parkdale Water Company charged a $500 connection fee in 1992 and 1993 and found that did not cover the costs. In addition, Parkdale stated that it never charged for meters or the installation of meters, though it did charge for installation of meter sets.

Although Parkdale was not able to locate the itemized bill for Larry's Equipment Repair, it was able to find the itemized bill for another customer for which Mr. Hoffmann had attached the application. Mr. Rod Blumenthal was charged $1000 for a service connection. The report by the subcontractor that performed the work showed that labor cost $560, pipe cost $118.30, and miscellaneous parts cost $297.83. After overhead was added, the cost exceeded $1000. In the connection for Larry's Equipment Repair, Parkdale stated, "This service was completed on April 1, 1997 at a cost to [Parkdale] of over $1,000 not including the meter or installation of the meter in the meter set. Included with the installation was the actual trenching and ¾" copper pipe from the meter set to the Complainant's building."

Also, Parkdale installed a backflow prevention device and is planning to upgrade it unless Mr. Hoffmann chooses to install his own backflow prevention device. According to Parkdale, its "current policy on backflow prevention devices is that all services will have them as a condition of continued service."

Applicable Law

***Jurisdiction and Regulation*.** The Commission has no jurisdiction over water utilities owned or operated by municipal or quasi municipal entities, ORS 757.005(1)(b)(A), or over utilities meeting all four of the following criteria: serving fewer than 300 customers, charging an annual average monthly residential rate of no more than $18 per customer; providing nondiscriminatory service, and providing adequate service, ORS 757.005(1)(b)(E).[1] Before 1999, Parkdale charged its customers less than $18 per month,

[1] A new law subsequently changed the standards determining which water companies are subject to regulation, effective January 1, 2004. Oregon Laws 2003, ch 82, § 4.

and so was not a public utility within the meaning of ORS 757.005(1)(b)(E).[2] Because the Commission had no jurisdiction over Parkdale at that time, Parkdale's actions before 1999 are not subject to regulation. However, in 1999, Parkdale began charging more than the $18 threshold and is now regulated for service quality.

For a water utility to be rate regulated, it must meet the definition of a public utility in ORS 757.005 and either serve more than 500 customers *or* meet the following criteria: serve fewer than 500 customers, charge or propose to charge an annual average monthly residential rate above a threshold established by the Commission, and twenty percent of the customers have petitioned the Commission for rate regulation. *See* ORS 757.061. OAR 860-036-0030 sets out the threshold levels of rates and charges for water utilities serving fewer than 500 customers. Currently, the threshold rate is $24. Because no petition has ever been submitted by Parkdale customers, Parkdale is not subject to rate regulation.

The exception to rate regulation encompasses more than just freedom from regulation of monthly rates. ORS 757.061(2) states, "The commission shall adopt rules establishing maximum rates for water utilities * * * for the purpose of determining whether such utilities are subject to regulation under" ORS 757.061(1). OAR 860-036-0030 establishes maximum rates "[p]ursuant to ORS 757.061(2)," including the maximum rate for a standard service connection. Because Parkdale is not subject to ORS 757.061(1) as a rate regulated water utility, the limit on service connection charges in OAR 860-036-0030 does not apply to Parkdale.[3]

Backflow Devices. Backflow is the reverse flow of water or other liquids, gases, mixtures, or other substances into the distribution pipes of a potable water supply from any source. There are two types of backflow conditions, backpressure and backsiphonage. Backpressure pushes water into the utility pipes and can occur if there is a booster pump, boiler, high elevation customers, or other customer piping systems that operate at high pressures. Backsiphonage pulls water into the utility pipes and can result from undersized supply piping, line breaks, reduced supply system pressure on the suction side of an online booster pump, sudden upstream high demand, or sudden loss of pressure in the company's supply lines, i.e., fire flows. In either case, the result is the same: undesirable substances may enter the potable water supply.[4]

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[2] On January 22, 1998, Staff noted that Parkdale was charging a $17 flat monthly residential rate. In response to a 1999 Staff survey, Parkdale reported that it charged a flat $24 monthly residential rate.

[3] Parkdale is only limited by the thresholds set in OAR 860-036-0030 in that if it charges more than those limits, it is required to notify its customers that they have the right to petition the Commission for rate regulation.

[4] Typical causes of backflow are sewerage systems, surface water pumps, reservoirs, fire fighting systems, inadequately protected flush valves, irrigation systems, multi-storied buildings, photo processing equipment, laundries, solar heating systems, swimming pools, private wells, cooling systems, elevation and pressure conditions, more than one service to a premise, water softeners, therapeutic baths, car washing (i.e., soap guns), weed control equipment, toilets, watering troughs, and overflow tanks.

Backflow, which is essentially contaminated water, introduced into the water supply system is an important concern for commercial and industrial users and can create a health hazard for residential users. Not only can it contaminate the distribution system, it can contaminate the water source, such as a well. Devices are available to prevent backflow. The Department of Human Services, Office of the State Public Health Officer,[5] regulates backflow devices and cross connection control programs. *See* OAR 333-061-0070 - 333-061-0074. There are several types of backflow prevention devices available, and the Office is responsible for approving backflow prevention devices and maintaining a list of those approved devices. *See* OAR 333-061-0070.

A backflow prevention device is a mechanical assembly used to prevent a backflow into a potable water system. There are many types of backflow prevention assemblies used in different situations and for different degrees of hazard, either existing or potential. The degree of hazard is based on the type of contamination that can flow into the water supply system.

In circumstances where a water system serves at least 15 service connections or 25 customers year round, the water supplier "shall ensure that [Department]-approved backflow prevention assemblies are installed at the service connection to premises where an approved airgap does not exist and:

(a) There is an auxiliary water supply which is, or can be, connected to the potable water piping;
(b) There is piping for conveying liquids other than potable water, and where that piping is under pressure and is installed in proximity to potable water piping;
(c) There is intricate plumbing which makes it impractical to ascertain whether or not cross connections exist;
(d) There is backsiphonage potential;
(e) Cross connections or potential cross connections exist."

OAR 333-061-0070 (4). It is unclear whether each of the situations in the five subsections must be present or if they can be present in the alternative. The rule further provides:

> In all public water systems, water suppliers shall ensure that the type of backflow prevention required under section (4) and (5) of this rule, are at

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[5] Originally, the Health Division administered the program. The legislature abolished the Health Division in 2001 and delegated its responsibilities to the Department of Human Services. Or Laws 2001, ch 900, § 1. It also declared its intention to substitute "Department of Human Services" for every mention of "Health Division." Or Laws 2001, ch 900, § 4(2)(e). Where the rules specify "the Division," we have changed the reference to comply with the 2001 law.

> least commensurate with the degree of hazard which exists: * * * (b) An approved double check valve assembly (DCVA) shall be installed where any substance other than potable water could backflow but does not pose an unreasonable risk to health. An approved double check valve assembly shall be the minimum protection for fire sprinkler systems using piping material that is not approved for potable water use and/ or which does not provide for periodic flow through during each 24 hour period.

OAR 333-061-0070 (6). Other requirements for a water system that serves at least 15 service connections or 25 customers year round include

- "a local ordinance or enabling authority which authorizes discontinuing water service to premises for failure to install an approved backflow device or conduct a required annual test on a backflow device," which is satisfied by the Public Utility Commission's rule 860-036-0205(2) which allows a water utility to disconnect service "[w]hen facilities provided are unsafe or do not comply with state and municipal codes governing service or the water utility's rules and regulations;"
- maintenance of "current records of backflow assemblies installed, inspections completed, and backflow assembly test results;" and
- preparation and submission of an annual written report to the Department of Human Services using the Department's prescribed format.

OAR 333-061-0070(1)(a)(A), (C), (D).

A water company with 300 or more service connections must also have at least one person certified in cross connection control inspections, unless specifically exempted by the Department; and have a written cross connection control plan. The written cross connection control plan must include a master list of facilities and premises which are subject to inspection and the hazard level for each; have a current list of cross connection control staff and work responsibilities; and detail the provision and schedule for an initial inspection, the installation and annual testing of each required backflow assembly, and a periodic re-inspection of each required backflow assembly. OAR 333-061-0070(1)(a)(B), (2). A water company may also adopt a cross connection control plan that is more stringent than the state requirements. *See* OAR 333-061-0070(11).

Customers have responsibilities, too, such as preventing contaminants from entering the potable water system, having their backflow prevention devices tested at least annually, and maintaining records of the backflow prevention tests. OAR 333-061-0070(10). "[W]here the water supplier has reasonable cause to believe that an existing or potential cross connection is located on the user's premises, the water supplier shall deny or discontinue service to those premises until an appropriate backflow prevention assembly is installed or until the cause of that hazard is eliminated." OAR 333-061-0070(1)(b).

The Public Utility Commission has considered requirements for water utilities. In some instances, a water utility's tariff provides that it "will automatically install backflow prevention devices during the normal course of business and system repairs." *Marina Water, Inc.*, Filed Tariff, Order No. 99-00610, Rule 43 (effective November 1, 1999). On the other hand, in some instances, the Commission has rejected a utility's attempt to install and bill for all backflow device installation and has instead kept a policy allowing customers to arrange for installation and testing. *See In re Juniper Utility Company for Water Service*, UW 65, Order No. 00-543, at 27. The Commission has standard wording that many water utilities have adopted in their tariffs:

> The utility will keep on file its current cross connection control program as required by the Oregon Human Resources Health Services Division. The utility is responsible to determine what constitutes a cross connection hazard and what type of backflow prevention assembly [is] required to remedy that hazard. The utility shall apply this standard to all customers nondiscriminately. To require a customer to install and test a backflow prevention assembly, the utility must first notify the customer in writing, identifying the cross connection hazard and the type of backflow prevention assembly required. The utility shall inform the customer that he/she is entitled to choose any qualified person to install and/or test the backflow prevention assembly and must provide the customer with a current list of certified backflow prevention assembly testers in the general area. The utility (if certified) may offer its own installation and testing services to the customer; however, the utility shall inform the customer that he/she is not obligated in any way to use the utility's services. When a backflow prevention assembly is required by the utility, the customer is responsible for its installation and annual testing by a certified tester. Failure to install and/or test a required backflow prevention assembly is grounds for disconnection. The utility shall keep a record of all backflow prevention assembly installations and tests.

See Sunriver Water LLC, Filed Tariff, First Revised Sheet No. 19, Rule 43 (effective December 5, 2003).

Thermal Expansion. Thermal expansion occurs naturally when cold water is heated; its density decreases and its volume expands. It is a common occurrence, and usually the expanded volume escapes through a temperature and pressure relief safety valve, leaking from water fixtures, or back through the pipes to the water main. If the pressure is not released, expensive and dangerous property damage can result in the form of ruptured pipes, flooding, pump damage to washing machines and dishwashers, scalding water, or exploding water heaters.

When a backflow device is installed between the customer's water line and the main water line, that route for thermal expansion is closed off. Without that method of thermal expansion relief, the dangers related to thermal expansion can increase.

The Oregon Department of Consumer and Business Services, Building Codes Division, has adopted portions of the Uniform Plumbing Code. OAR 918-750-0110(1). Adopted provision 608.3 of the Code states

> Any water system provided with a check valve or a pressure regulating device which does not have a bypass feature at its source shall be provided with an approved, listed, adequately sized pressure relief valve.
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> * * * * *
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> In addition to the required pressure or combination pressure and temperature relief valve, an approved, listed expansion tank or other device designed for intermittent operation for thermal expansion control shall be installed whenever * * * any device is installed that prevents pressure relief through the building supply.

The Building Codes Division provides lists and standards of approved devices to relieve thermal expansion.

Conclusions of Law and Fact

Service Connection. We have no jurisdiction over the portion of Mr. Hoffmann's complaint that occurred prior to regulation of Parkdale. At the time that Parkdale connected service to Larry's Equipment Repair, Parkdale was not subject to regulation as a public utility. Therefore, we deny the portion of the complaint that relates to the $1000 charge for the service connection.

Backflow Prevention Devices and Thermal Expansion Hazard. To the extent that Mr. Hoffmann challenges the current presence of the backflow prevention device on his line and the continued threat of thermal expansion, we presently have jurisdiction over Parkdale's service quality. Parkdale's cross connection control program is very broadly worded. It allows for control or prevention of cross-connections, or links between piping carrying potable and non-potable water, by installation of a backflow prevention device. Parkdale chose to interpret that wording strictly in order to prevent contamination of its water system by declaring that all connections would eventually have a backflow prevention device.

That interpretation is well within the law. The rules governing cross connection control programs state that a water utility can implement a plan more restrictive

than state requirements. *See* OAR 333-061-0070(1). The Commission has in fact approved tariff language allowing a water utility to install a backflow connection device at every service connection. *Marina Water, Inc.*, Filed Tariff, Order No. 99-00610, Rule 43. For these reasons, we find that Parkdale's installation and proposed upgrade of backflow prevention devices at customer service connections was not unlawful.

Mr. Hoffmann's grievance that he was not aware of the thermal expansion hazard is valid. Although Parkdale did notify customers that backflow prevention devices were to be installed, it is not clear that Parkdale explained potential consequences so that customers could take action to bring their water systems into compliance with applicable codes. We have not required such notice in the past but advise water utilities that stronger notice is recommended in the future.

However, the water utility is not required to remove the backflow prevention device, which serves an essential safety function. Customers should install thermal expansion devices, in accordance with the requirements of Uniform Plumbing Code 608.3 and the requirements of their own water systems.

ORDER

IT IS ORDERED that the complaint is denied.

Made, entered, and effective _____.

_____	_____
Lee Beyer Chairman	**John Savage** Commissioner
	_____
	Ray Baum Commissioner

A party may request rehearing or reconsideration of this order pursuant to ORS 756.561. A request for rehearing or reconsideration must be filed with the Commission within 60 days of the date of service of this order. The request must comply with the requirements in OAR 860-014-0095. A copy of any such request must also be served on each party to the proceeding as provided by OAR 860-013-0070(2). A party may appeal this order to a court pursuant to applicable law.