

**TOWN OF PRESCOTT VALLEY  
REQUEST FOR COUNCIL ACTION  
Date: April 14, 2016**

**SUBJECT:** Amendments to Utility Regulations for Water & Wastewater Service

**SUBMITTING DEPARTMENT:** Utilities

**PREPARED BY:** Neil Wadsworth, Director

**AGENDA LOCATION:** Comments/Communications , Consent , Work/Study ,  
New Business , Public Hearing , Second Reading

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**ATTACHMENTS:** (a) Resolution No. 1960 adopting by reference amendments to Articles 9-05, 9-05a and 9-05b; (b) Ordinance No. 815 amendments to Town Code Articles 9-05, 9-05a and 9-05b; and (c) Resolution No. 1961 repealing separate Utility Regulations

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**SUMMARY/BACKGROUND:** Town staff is proposing updates to local limits related to wastewater discharges and to backflow requirements for domestic water and fire protection systems. In the process, staff has noted that separate Utility Regulations simply mirror the detailed operational requirements in the Town Code and now proposes that the separate Utility Regulations be repealed as redundant.

Local Limits:

The National Pretreatment Program (NPP) developed by the United States Environmental Protection Agency (USEPA) is intended to control discharge of pollutants from local Publicly Owned Treatment Works (POTWs). The statutory authority for NPP is the Federal Water Pollution Control Act of 1972, later amended and renamed the Clean Water Act (CWA). Under Section 307(b), USEPA developed National Pretreatment Standards. It also delegates authority for pretreatment programs to the individual states. POTWs treating flows in excess of 5 million gallons per day must adopt and administer NPPs. POTWs with flows of 5 million gallons or less are regulated by state agencies in conjunction with wastewater regulations developed by the individual municipalities. The Prescott Valley POTW treats less than 5 million gallons per day.

Prescott Valley is required to establish “local limits” as to what can be discharged into the local wastewater system in relation to concentrations for specific pollutants. Such limits must be developed through a technological evaluation that includes sampling, mathematical modeling, and information specific to the ability of the POTW to remove the pollutants. When the Arizona Department of Environmental Quality (ADEQ) audited the Town’s local limits in April 2009, ADEQ suggested that the Town conduct a technological study to develop new limits. ADEQ followed up with an April 2013 Consent Decree Judgment (CV2013-003310) requiring such a study by a third party. The Town then retained the services of Black and Veatch (the same engineering group responsible for designing the POTW expansion in 2005). The study was completed in December 2013 and staff has now completed its review and is ready to propose adoption of new limits.

The current Town Code provision establishing local limits reads as follows:

- D. Local Limits. The following pollutant limits are established to protect against pass through and interference. No person shall discharge wastewater containing in excess of the following (in milligrams per liter):

Total grease, oil, etc.	100.0	Copper	10.0
Dissolved Sulfides	0.5	Lead	0.5
Cyanide	0.1	Manganese	0.5
Arsenic	0.1	Mercury	0.05
Barium	10.0	Selenium	0.1
Boron	10.0	Silver	0.5
Cadmium	0.1	Zinc	50.0
Chromium IV	0.5		

It is proposed that the new provision read as follows:

- D. Local Limits. The following pollutant limits are established to protect against pass through and interference. No person shall discharge wastewater containing in excess of the following (in milligrams per liter) **unless otherwise noted as “Reserved”**.

Dissolved Sulfides	0.5	Cyanide	1.3
Total Grease, Oil, Etc.	100.0	Fluoride	Reserved
Antimony	Reserved	Lead	0.3
Arsenic	0.5	Mercury	0.001
Barium	Reserved	Molybdenum	Reserved
Beryllium	Reserved	Nickel	Reserved
Cadmium	0.1	Selenium	0.2
Chromium, Total	3.0	Silver	0.5
Chromium VI	Reserved	Thallium	2.2
Copper	1.6	Zinc	2.9

It is also proposed that Town Code Subsection 9-05-080(A)(2)(e) regarding the low and high limit for pH (a measure of acidity or alkalinity expressed in standard units from 0 to 14) be changed. Staff believes that a new upper limit can be applied without negatively impacting the collection system or POTW. Staff is recommending increasing the upper pH limit to 11.

Backflow:

The backflow prevention program in the water system seeks to prevent backpressure or backflow from system users into the water system (thereby protecting the integrity of the water). Minimum requirements are contained in the Arizona Administrative Code (AAC) R18-4-215 and in the International Plumbing Code (IPC). Backflow can be the result of low pressure in the water system (caused by major breaks, leaks, or by high localized usage...such as when fire hydrants are opened to fight fires). Back pressure can be the result of commercial or industrial users using pumps to boost service pressure or water pressure in tall buildings.

The AAC and IPC allow several different types of backflow devices (or no device at all), based on the type of business activity on the premises. Any time there is a change in business activity the backflow requirement must be re-evaluated. If necessary, surveys must be conducted from time to time to ensure that customers have the correct device installed. Devices allowed (in decreasing order of protection) are: Air Gap (AG), Reduced Pressure Backflow Device (RP), Pressure Vacuum Breaker (PVB), or Double Check Valve Assembly (DC).

For more than 10 years, the Town has had an administrative practice of applying standards higher than the minimum in the AAC/IPC. Under AAC R-18-4-215.E the Town has been proactive and required the highest level of protection. All commercial/industrial properties/users have an RP located just after the

water meter. When business changes occur, a new survey isn't necessary because the highest level of protection is already being provided. Staff proposes to codify this enforcement practice in the Town Code.

The proposed new Town Code provisions is as follows:

Table 1 - Minimum Type of Backflow Prevention Based on Hazard

Premises Requiring Backflow Prevention	Type of Backflow Prevention Required			
	DCVA	RPBA	PVBA	Air Gap
Any Very High Risk Hazard*				X
Any High Risk Hazard*		X		
Any Low Risk Hazard*	X			
Auxiliary Water Systems, Infrastructure, Pumps or Reservoirs on Property		X		
Buildings Greater than Three (3) stories or Thirty-Four Feet (34') in Height	X			
Commercial / Government / Institutional / Industrial Facilities		X		
Fire Lines With Antifreeze or Additives		X		
Fire Lines With no Antifreeze or Additives	X			
Fire Lines With Compressors / Dry Systems		X		
Commercial Class 1 and 2 Fire Systems	X			
Commercial Class 3-6 Fire Systems		X		
Commercial or Industrial Irrigation		X		
Multifamily Larger than Fourplex		X		
Radioactive Materials Processing				X
Intricate Internal Plumbing Arrangements		X		
Any Premise with Access to Reclaimed Water		X		
Wastewater - Plants, Lift Stations, Pumping Stations, Dump Stations		X		
Mobile Homes, Storage Yards or RV Parks Served with Master Meter(s)		X		
Water Trucks. Sewer, Reclaimed Water or Storm Cleaning Equipment				X
Temporary Construction Use (fire hydrant or auxiliary connection)		X		X

\*Hazards not defined elsewhere in this Table. The Town has sole discretion to determine what constitutes a hazard.

2. Single family residential units (used solely for residential purposes) requiring a sprinkler system shall not be required to install a backflow assembly, provided:
  - a. The system is constructed using approved potable water piping and materials.
  - b. The system does not contain anti-freeze or other chemicals.
  - c. The system is connected to the customer's side of the water meter.

**OPTIONS ANALYSIS:** The Town Council may approve these changes to the Town Code and repeal of Regulations as proposed, OR decline to take some or all of these proposed actions.

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**ACTION OPTION:** (a) Motion to authorize the Mayor (or, in his absence, the Vice Mayor) to sign Resolution No. 1960 adopting by reference amendments to Town Code Articles 9-05, 9-05a and 9-05b, **OR** Motion not to approve Resolution No. 1960. **VOTE.**

(b) Motion to read Ordinance No. 815 approving proposed amendments to Town Code Articles 9-05, 9-05a and 9-05b by title only on two separate occasions and then place the same on final passage, **OR** Motion not to read Ordinance No. 815. **VOTE.**

[if the motion is in favor of reading Ordinance No. 815, the Mayor instructs the Town Clerk to read Ordinance No. 815 by title only for the first reading.]

(c) Motion to authorize the Mayor (or, in his absence, the Vice Mayor) to sign Resolution No. 1961 repealing the separate Town Utility Regulations, **OR** Motion not to approve Resolution No. 1961. **VOTE.**

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**RECOMMENDATION:** Staff recommends taking the required actions to amend the Town Code provisions related to new local limits and backflow requirements, and to repeal the separate Utility Regulations.

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**FISCAL ANALYSIS:** Staff does not believe that the proposed changes will have any appreciable fiscal impact on Town utility operations or on the current cost of business or residential occupancy in Prescott Valley.

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**REVIEWED BY:**

Management Services Director \_\_\_\_\_

Town Clerk \_\_\_\_\_

Town Attorney \_\_\_\_\_

Town Manager \_\_\_\_\_

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**COUNCIL ACTION:**

Approved  Denied  Tabled/Deferred  Assigned to \_\_\_\_\_