1 (Published in the Topeka Metro News July 16, 2008) 2 3 **ORDINANCE NO. 19123** 4 5 AN ORDINANCE introduced by City Manager Norton N. Bonaparte, Jr., regarding 6 backflow prevention, cross connection control, amending City of 7 Topeka Code §§ 26-446, 26-448, 26-449, 26-458, 26-459, 26-463, 26-8 464, 26-465 and 26-466 and specifically repealing said original 9 sections and §§ 26-450 through 26-454, 26-457, 26-460, 26-461, 26-462 and 26-464. 10 11 12 BE IT ORDAINED BY THE COUNCIL OF THE CITY OF TOPEKA, KANSAS: 13 That section 26-446, Definitions, of The Code of the City of Topeka, Section 1. 14 Kansas, is hereby amended to read as follows: 15 Definitions. 16 In addition to those terms defined in the Uniform pPlumbing eCode currently adopted 17 by section 26-409the City of Topeka, for the purposes of this division, the following terms 18 shall have the meanings ascribed to them in this section: 19 Approved backflow training provider means training courses which are approved by 20 the Wwater Superintendent as backflow/cross connection training providers. A list of 21 approved training courses will be maintained by the water superintendent. Approved 22 training courses shall include, but are not limited to, backflow/cross connection training 23 courses offered by the American Society of Safety Engineers (ASSE), the Plumbing-24 Heating-Cooling Contractors Association (PHCC) and the American Water Works 25 Association (AWWA). 26 Any organization or individuals (other than the ASSE, PHCC and AWWA) desiring 27 approval shall submit to the Water Superintendent for the City of Topeka, their course 28 curriculum, test laboratory equipment list and their curriculum testing procedures. 29 Approved assembly means a backflow preventer that contains two (2) shut-off

30 valves and one (1) to four (4) properly located test ports in addition to two (2) internal 31 components, that is tested and accepted by a recognized testing laboratory approved by 32 the Kansas Department of Health and Environment (KDHE) and the water superintendent. 33 Approved device means devices a backflow preventer that does not contain shut-off 34 valves or test ports and is tested and accepted by a recognized testing laboratory approved 35 by the stateKansas dDepartment of hHealth and eEnvironment (KDHE) and the eitywater 36 superintendent. 37 Auxiliary water supply means any water supply on or available to the premises other than the city's approved public water supply. These auxiliary waters may include water from 38 39 another purveyor's public potable water supply or any natural source, such as a well, spring, 40 river, stream, harbor and so forth, used waters, or industrial fluids, 41 AWWA Manual means the American Water Works Association. AWWA Manual M14 42 shall be used as a reference in enforcement of this Code, current edition, published by the 43 American Water Works Association. 44 Backflow license means a document issued by the development services division to 45 a certified backflow tester/repair technician. 46 Certified backflow tester/repair technicians are those means individuals who have 47 successfully completed an accredited training course for initial certification by an approved 48 backflow training provider. Additionally a training course for recertification by an approved 49 backflow training provider is required every three yearssession recognized by the Kansas 50 Department of Health and Environment (KDHE) and the water superintendent. The

51 development services division shall license the tester/repair technicians after ascertaining

52 the technician meets the abovespecific qualifications.

53

CEU means one (1) continuing education unit which shall be earned for each one (1)

54 hour of actual classroom instruction.

55 *Containment* means a backflow prevention device<u>assembly</u> installed at the service 56 connection to the property.

57 *Degree of hazard* shall mean either a low hazard (pollutant) or high hazard 58 (contaminate). The assessment for the "degree of hazard" shall be derived from the 59 evaluation of conditions within a system.

60 *Domestic service* means the pipe carrying potable water from the water meter or

61 other source of water supply to a building or other point of use or distribution on the lot.

62 Domestic service shall also mean "building supply" or "water service."

63 Dual check valve means a device consisting of two (2) internally loaded soft-seated

64 check valves. This device does not contain test ports and is acceptable for use only at the

65 meter of residential customers or two (2) tightly closing resilient-seated shut-off valves. Dual

66 check valves are not approved for installation as backflow prevention devices.

67 *Free water surface* means a water surface at atmospheric pressure.

68 High hazard is a type of cross connection or potential cross connection involving any

69 substance that could, if introduced into the potable water supply, cause death, illness,

70 spread disease, or have a high probability of causing such effects.

71 *Hold harmless agreement* is a document filed with the development services division

72 to permit installation of lawn irrigation systems in an easement or right-of-way.

73 Industrial fluids means any fluids or solutions that may be chemically, biologically or

74 otherwise contaminated or polluted in a form or concentration that would constitute a

- 75 <u>health, system, pollution or plumbing hazard if introduced into an approved water supply.</u>
- 76 This may include, but shall not be limited to, polluted or contaminated waters; all types of
- 77 processed waters and used waters originating from the public potable water system that

78 may have deteriorated in sanitary quality; chemicals in fluid form; plating acids and alkalis;

79 circulating cooling waters connected to an open cooling tower; or cooling towers that are

80 chemically or biologically treated or stabilized with toxic substances; contaminated natural

81 waters, such as wells, springs, streams, rivers, bays, harbors, seas, irrigation canals or

82 systems, etc.; oils, gases, glycerin, paraffin, caustic and acid solutions; and other liquid and

83 gaseous fluids used in industrial or other purposes, including for firefighting purposes.

- *Isolation* shall-means the appropriate method of backflow prevention within the
   *consumer'scustomer's* potable water system at the point of use.
- 86 <u>KAR means Kansas Administrative Regulations.</u>

87 *KDHE* means the Kansas Department of Health and Environment.

88 Low hazard is a type of cross connection or potential cross connection involving any

89 substance that generally would not be a health hazard, but would constitute a nuisance, or

90 be aesthetically objectionable, if introduced into the domestic water supply.

91 Service connection means the point where the public water supply connects to the

92 customer's water service, usually at the water meter or property line.

93 USC <u>Manual</u> means the <u>USC Manual of Cross Connection Control</u>, current edition.

94 of<u>published by</u> the University of Southern California, Foundation for Cross Connection

95 Control and Hydraulic Research. The USC Manual of Cross Connection Control shall be

96 used as a reference in the enforcement of this Code.

97 USEPA <u>Manual</u> means the United States Environmental Protection Agency. The
 98 "Cross Connection Manual." current edition. published by the USEPA shall be used as a

99 reference in enforcement of this CodeUnited States Environmental Protection Agency.

- 100 *Vacuum* means any absolute pressure less than that exerted by the atmosphere.
- 101 *Water superintendent* means the superintendent of the City of Topeka water division

# 102 or his or her designee.

103 <u>Section 2</u>. That section 26-448, Responsibility for enforcement, of The Code of
104 the City of Topeka, Kansas, is hereby amended to read as follows:

105 **Responsibility for enforcement.** 

106 Development services divisionThe water superintendent shall be responsible for 107 effectively conducting the cross connection control program of the city's potable water 108 supply and the customer's potable water system. The development services division water 109 superintendent may use the current version of the Uniform Plumbing Code, AWWA Manual 110 14, USEPA Gross Connection Control-Manual and the USC Gross Connection Control and 111 Hydraulic Research Manual and all KAR from the KDHE in developing responsible 112 judgement for enforcement of this code. If, in the judgment of the divisionwater 113 superintendent, an approved backflow prevention device or assembly is required, the 114 development services director or designeewater superintendent willshall give notice in 115 writing to the customer to install the properan approved device or assembly. The customer 116 shall immediately install, test or repair the properan approved device or assembly at the 117 customer's expense. Failure to comply shall be grounds for discontinuing water service to 118 the customerservice location until the device is properly installed, tested, or rebuilt repaired. 119 Determinations made by the water superintendent for the cross connection control 120 and backflow prevention program may be appealed to the plumbing board. The water 121 superintendent shall be notified of all such appeals and the decision of the board. 122 Section 3. That section 26-449, Cross connections -- In general, of The Code of 123 the City of Topeka, Kansas, is hereby amended to read as follows: 124 **Cross connections -- In general.** 

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The potable water supply system of the city and the <u>customer's</u> potable water system

private users shall be designed, installed and maintained to best prevent contamination or pollution from non-potable liquids, solids or gases from being introduced into the potable water supply through cross connections or any other piping connections to the system. Any water being provided by the city will fall under the rules and regulations of the cross connection program. All public or private users being supplied by Any connection to the city's potable water supply, directly or indirectly, shall conform to standards set up established by city the water superintendent.

133 Cross connections between potable water systems and other systems or equipment

134 <u>containing water or other substances of unknown or questionable safety are prohibited</u>

135 except when and where a suitable protective device or assembly is installed, tested and

136 maintained to ensure proper operation on a continuing basis. The device or assembly that

137 is installed shall be approved by the water superintendent.

138 Potable water connections to boilers shall be made through an air gap or through a

139 RP. Boilers used for cooking and processing food may have a DC installed on the boiler

140 water connection. Chemicals used for treatment in cooking and food-processing boilers

141 shall be U.S. Food and Drug Administration (FDA) approved for human consumption.

142 Existing Work that is an actual or potential cross connection must be corrected.

143 <u>Section 4</u>. That section 26-450, Same -- Prohibited, of The Code of the City of
144 Topeka, Kansas, is hereby repealed.

## 145 Same--Prohibited.

Cross connections between potable water systems and other systems or equipment
 containing water or other substances of unknown or questionable safety are prohibited
 except when and where suitable protective devices such as the reduced pressure zone

149 backflow preventer are installed, tested and maintained to ensure proper operation on a

150 continuing basis. The device that is installed shall be approved by the development

151 services director or his designee and if controversy arises it may be appealed to the

152 plumbing board.

153 <u>Section 5</u>. That section 26-451, Interconnections, of The Code of the City of
 154 Topeka, Kansas, is hereby repealed.

#### 155 Interconnections.

156 Interconnection between two or more public water supplies shall be permitted only

157 with the approval of the Kansas Department of Health and environment pursuant to the

158 provisions of K.S.A. 65-163a.

159 <u>Section 6</u>. That section 26-452, Individual water supplies, of The Code of the City
160 of Topeka, Kansas, is hereby repealed.

#### 161 Individual water supplies.

162 Connections between a private water supply and the public potable water are

163 prohibited pursuant to the provisions of K.S.A. 65-163a.

164 <u>Section 7</u>. That section 26-453, Connections to boilers, of The Code of the City of
165 Topeka, Kansas, is hereby repealed.

## 166 Connections to boilers.

167 Potable water connections to boilers shall be made through an air gap or through a

168 reduced pressure zone principle backflow preventer. Boilers used for cooking and

- 169 processing food may have a double check valve (DCV) installed on the boiler water
- 170 connection. Chemicals used for treatment in cooking and food-processing boilers shall be
- 171 Federal Food and Drug Administration (FDA) approved for human consumption.

174	Backflow live	<del>cense.</del>
173	Topeka, Kansas, is hereby repealed.	
172	Section 8.	That section 26-454, Backflow license, of The Code of the City of

175 (a) No permit for installation device shall be issued except to a certified backflow
 176 tester/technician holding a current backflow license. Backflow licenses shall require a fifty
 177 dollar (\$50.00) annual fee.

178 (b) No permit shall be issued until a complete application, including the annual
 179 fee, has been submitted to the development services division on forms provided by the
 180 division.

181 (c) In addition to the foregoing license and application fees, backflow

182 maintenance services shall also be subject to the following administration fees and

183 charges:

184 Processing of returned incomplete application: . . . \$30.00

185 Failure to have an inspection report (1st offense): ... \$50.00

186 Failure to have an inspection report (2nd offense): . . . \$100.00

187 <u>Section 9</u>. That section 26-457, Minimum required airgap, of The Code of the City

188 of Topeka, Kansas, is hereby repealed.

# 189 Minimum required airgap.

190 The minimum airgap shall be determined as follows:

191 (1) How measured. The minimum required airgap shall be measured vertically

192 from the lowest end of a potable water outlet to the flood rim or line of the fixture or

193 receptacle into which it discharges.

194 (2) Size. The minimum required airgap shall be twice the effective opening of a

195 potable water outlet unless the outlet is a distance less than three times the effective

opening away from a wall or similar vertical surface, in which cases the minimum required
airgap shall be three times the effective opening of the outlet. In no case shall the minimum
required air gap be less than shown in Table 6-3 of the 2000 UPC.

<u>Section 10</u>. That section 26-458, Approval of devices, of The Code of the City of
 Topeka, Kansas, is hereby amended to read as follows:

201 Approval of devices or assemblies.

202 Before any devices or assemblies for the prevention of backflow or backsiphonage is 203 installed, it shall have first been certified by a recognized testing laboratory acceptable to 204 KDHE. These authorities include the American Society of Sanitary Engineers (ASSE), 205 American Water Works Association (AWWA). University of Southern California Foundation 206 for Cross Connection Control and Hydraulic Research, Canadian Standards Association 207 (CSA), International Association of Plumbing and Mechanical Officials (IAPMO) or Factory 208 Mutual (FM), and other testing or certifying authorities that may be accepted by KDHE. 209 Devices or assemblies installed in a building potable water supply distribution system for 210 protection against backflow or cross connection shall be maintained in good working 211 condition by the person responsible for the maintenance of the systemcustomer. 212 Development services division designee The water superintendent shall inspect such 213 devices or assemblies and if found to be defective or inoperative shall require the repair or 214 replacement thereof. Before the placement of a backflow prevention device, the licensed 215 plumber, on new installation and/or the certified backflow technician on replacements, shall 216 inform the development services division that the device is being installed. A certified 217 tester/repair technician will then test the device and register it for scheduled testing. The 218 development services division shall have the right to test a device to insure that it complies 219 with the provisions of the code.

- 220 Section 11. That section 26-459, Installation of devices; types, of The Code of the 221 City of Topeka, Kansas, is hereby amended to read as follows:
- 222 Installation of devices; types Types of devices or assemblies; installation and 223 replacement.
- 224 (a) Protective devices required. The type of protective approved device or 225 assembly required to be installed on the water service line to protect the water supply under 226 this division shall be determined by the degree of hazard which exists as determined by the 227 enforcement agencywater superintendent.
- 228 \_The following are illustrative examples which pose a high degree of 1. 229 hazard requiring an approved air-gap or reduced-pressure principle backflow 230 prevention assembly (RP):
- 231 Premises having auxiliary water supply shall protect the public (<del>1</del>A) 232 system by either an approved airgap or an approved reduced pressure 233 principle backflow prevention assembly.
- 234 (2) Premises having water or substances which would be non-235 hazardous to the health and well-being of the consumers shall protect the 236 public system with no less than an approved double check valve assembly. 237 Additionally, residential premises and commercial premises which have lawn 238 irrigation systems which are not used to apply fertilizers, pesticides, or other 239 chemicals shall protect the public system with no less than an approved 240 double-check valve assembly.
- 241 Premises where material dangerous to health is handled in a (<del>3</del>B) 242 manner which creates an actual or potential hazard-shall protect the public 243 system by an approved airgap or an approved reduced pressure principle

backflow prevention assembly.

(4<u>C</u>) Premises where with uncontrolled cross connections are
 uncontrolled shall protect the public water supply by installing an approved
 airgap or an approved reduced pressure principle backflow prevention device
 at the service connection.

249(5D)Premises where, because of security requirements or other250prohibitions, it is impossible to complete an in-plant cross connection251inspection, the public system shall be protected by the installation of an252approved airgap or an approved reduced pressure principle backflow253prevention assembly at the service connection.

254 Premises which may fall into one or more of the aforementioned categories may be

255 but are not limited to, the following:

256 <u>2.</u> The examples of uses or activities which may constitute a high degree of

257 hazard to the water supply and shall require an approved device or assembly specified by

258 the water superintendent determined by the degree of hazard include, but are not limited to.

259 the following:

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260 Beverage bottling plants.

261 Buildings: Hotels, apartments, public or private buildings, or other structures having

262 actual or potential cross connections. This includes structures of four stories or more and/or

- structures equipped with booster pumps.
- 264 Car wash facilities.
- 265 Chemical manufacturing, handling or processing plants.
- 266 Chemically contaminated water.
- 267 Dairies and cold storage facilities.

268	Dentist offices.
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- 269 Doctor's offices equipped with laboratories, or surgeries, or other potential cross
- 270 connections
- 271 Film or photography processing laboratories.
- 272 Fire <u>protection</u> systems.
- 273 Hospitals, medical centers, morgues, mortuaries, autopsy facilities, clinics, or
- 274 nursing and convalescent homes.
- 275 <u>Ice machines.</u>
- 276 Irrigation systems.
- 277 Laundries.
- 278 Metal cleaning, metal plating, processing or fabricating plants.
- 279 Nursing and convalescent homes designed for acute care.
- 280 Oil and gas production, storage or transmission facilities.
- 281 Packing or food processing plants.
- 282 Paper and paper products plants.
- 283 Power plants.
- 284 Radioactive materials plants or handling facilities.
- 285 Restricted or classified facilities.
- 286 Rubber <u>manufacturing plants</u>.
- 287 Sand, gravel or asphalt plants.
- 288 Schools or colleges.
- 289 Sewage and storm drainage facilities and reclaimed water systems.
- 290 Solar heating systems.
- 291 Temporary <u>non-emergency</u> service: Fire hydrants, air valves, blow-offs and other

292 outlets.

293 <u>Veterinary facilities.</u>

294 Waterfront marinas.

(b) *Installation*. Approved devices <u>or assemblies</u> shall be installed at all fixtures and equipment where backflow or backsiphonage may occur and where a minimum air-gap between the potable water outlet and the fixture or equipment flood\_level rim cannot be maintained. Backflow and backsiphonage devices <u>or assemblies</u> of all types shall be in an accessible location to allow for proper testing <u>and shall be installed in a pit in accordance</u> with specifications established and maintained by the water superintendent.

301 Connection to the potable water piping and initial installation of all backflow 302 prevention devices shall be done by a licensed plumber employed by a licensed 303 plumbing contractor certified in backflow testing or repair. Replacement of an existing 304 device may be done by certified backflow tester/technicians employed in the trade or 305 craft for which the backflow preventer was installed (i.e., lawn irrigation, fire 306 suppression, ice machine installation, etc.). All devices shall be installed so they will be 307 accessible for regular inspection and testing.

308 Connection to the potable water piping and initial installation of all backflow 309 prevention devices shall be done by a licensed plumber employed by a licensed plumbing 310 contractor certified in backflow testing or repair. Replacement of an existing device may be 311 done by certified backflow tester/technicians employed in the trade or craft for which the 312 backflow preventer was installed (i.e., lawn irrigation, fire suppression, ice machine 313 installation, etc.). All devices shall be installed so they will be accessible for regular 314 inspection and testing.

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Access and clearance shall be provided for the required testing, maintenance and

316 repair. Access and clearance shall require a minimum of one (1) foot between the lowest

317 portion of the assembly and grade, floor or platform. Water superintendent approval is

- 318 required before backflow devices or assemblies are installed at an elevation of six (6) feet
- 319 or more above the grade, floor or platform.
- 320 Connection to the potable water piping and initial installation of all backflow
- 321 prevention devices or assemblies shall be made by a Topeka licensed plumber employed
- 322 by a Topeka licensed plumbing contractor.
- 323 (c) Replacement of an existing device or assembly may be made by licensed and
- 324 certified backflow tester/technicians employed in the trade or craft for which the backflow
- 325 <u>device or assembly was installed (i.e., lawn irrigation, fire suppression, ice machine</u>
- 326 installation, etc.).
- 327 Certified backflow/tester technicians shall maintain, repair and test devices or 328 assemblies.
- 329 (d) Cross connection control fees for backflow preventers and lawn irrigation
- 330 systems connected to the potable water supply system of the city outside the city limits shall
- 331 be established by the water superintendent, as approved by the public works director, and
- 332 <u>maintained in a schedule of fees and charges. The water superintendent shall determine</u>
- 333 such fees for residential and commercial installations and replacements, based on the cost
- 334 of service provided and an additional charge equal to the percentage difference between
- 335 inside city and outside city water rates.
- 336 (e) It shall be unlawful for any person to knowingly make connection to the
- 337 potable water supply system of the city for the categories of premises in this section without
- 338 an approved assembly or approved device.
- 339 (1) Penalty. Any person violating this section may be punished by;

340	<u>A. Fine</u>	of not more than \$499.	<u>00; and/or</u>	
341	B. Impr	isonment in jail for not	more than one hundred seventy-	
342	<u>nine (179) days.</u>			
343	Section 12. That section 26-460, Tanks and vats below rim supply, of The Code of			
344	the City of Topeka, Kansas, is hereby repealed.			
345	Tanks and vats below rim supply.			
346	Where a potable water outlet terminates below the rim of a tank or vat, the following			
347	provisions shall apply:			
348	(1) If the tank or vat has an overflow of diameter not less than given in table 1,			
349	the overflow pipe shall be provided with an airgap as close to the tank as possible.			
350	(2) The potable water outlet to the tank or vat shall terminate a distance not less			
351	than one and one-half times the height to which water can rise in the tank above the top of			
352	the overflow. This level shall be established at the maximum flow rate of the supply to the			
353	tank or vat and with all outlets except the airgap overflow outlet closed.			
354	(3) The distance from the outlet to the high water level shall be measured from			
355	the lowest point of the potable water supply outlet.			
356	Table 1.			
357	Size of Overflow Pipes For Water Supply Tanks			
358				
359	Maximum capacity of Water supply line to	pipe (Inches ID)		
000		2		
360	51-100 gpm	21/2		
000	<del>101-200 gpm</del>	3		
361	<del>201-400 gpm</del>	4		
	<u>401-700 gpm</u>	5		
	<del>701-1,000 gpm</del>	6		
	<del>Uver 1,000 gpm</del>	<del>ŏ</del>		

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363 Section 13. That section 26-461, Tables of fixtures, equipment and devices, of The

364 Code of the City of Topeka, Kansas, is hereby repealed.

- 365 **Tables of fixtures, equipment and devices.**
- 366 (a) Connections not subject to backpressure. Where a water connection is not
- 367 subject to backpressure, a vacuum breaker shall be installed on the discharge side of the
- 368 last valve on the line serving the fixture or equipment. A partial list of some conditions
- 369 requiring protective devices of this kind are given in the following table
- 370 Cross Connections Where Protective Devices are Required and Critical Level (C-
- 371

L) Settings For Vacuum Breakers

Fixtures or equipment	Method of installation
Aspirators and ejectors	C-L at least six inches above flood level
	of receptacle served.
Dental units	On models without built-in vacuum
	breakers CL at least six inches above
	flood level rim of bowl.
Commercial dish washing machine	C-L at least six inches above flood level
	of machine. Installed on both hot and
	cold water supply lines.
Garbage can cleaning machines	G-L at least six inches above flood level
	of machine. Installed on both hot and
	cold water supply lines.
Hose outlets	C-L at least six inches above highest
	point on hose line.
Commercial laundry machines	C-L at least six inches above flood level
	of machine. Installed on both hot and
	cold water supply lines
Lawn sprinklers	C-L at least 12 inches above highest
	sprinkler head or discharge outlet.
Steam tables	C-L at least six inches above flood level
	r <del>im.</del>
Tanks and vats	C-L at least six inches above flood level
	r <del>im or line.</del>
Through urinals	C-L at least 30 inches above perforated
	f <del>lush pipe.</del>
Toilet flush tanks	Equipment with approved ball cock,
	Installed according to manufacturer's

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		instructions.	
Ho	<del>se bibs</del>	C-L at least six inches above flood level	
		of receptacle served.	
	All devices must t	e tested and/or certified by an authority acceptable to KE	HE

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373 before they are installed.

374 These authorities include the American Society of Sanitary Engineers (ASSE), 375 American Waterworks Association (AWWA), Foundation for Cross Connection Control and 376 Hydraulic Research, University of Southern California (FCCCHR of USC), Canadian 377 Standards Association (CSA), Southern Building Code Congress (SBCC) or Factory Mutual 378 (FM). Other testing or certifying authorities may be accepted by KDHE. 379 (b) Connections subject to backpressure. Where a potable water connection is made 380 to a line, fixture, tank, vat, pump or other equipment with a hazard of backflow or 381 backsiphonage where the water connection is subject to backpressure, and an airgap 382 cannot be installed, the development services water division may require the use of an 383 approved reduced pressure principle backflow preventer. A partial list of such connections 384 is shown in the following table: 385 Partial List of Cross Connections Subject to Back Pressure Chemical lines. 386 387 Dock water outlets. 388 Individual water supplies. 389 Industrial process water lines. Tanks and vats: Bottom inlets. 390 391 Pumps. 392 Steam lines. 393 Swimming pools.

394 Hose bibs.

395 Boilers.

396 <u>Section 14</u>. That section 26-462, Low pressure cutoff required on booster pumps,
 397 of The Code of the City of Topeka, Kansas, is hereby repealed.

398 Low pressure cutoff required on booster pumps.

When a booster pump is used on a water pressure booster system and the possibility exists that a positive pressure of ten psi or less may occur on the suction side of the pump, there shall be installed a low-pressure cutoff on the booster pump to prevent the creation of a vacuum or negative pressure on the suction side of the pump, thus cutting off water to other outlets.

404 <u>Section 15</u>. That section 26-463, Maintenance requirements, of The Code of the 405 City of Topeka, Kansas, is hereby amended to read as follows:

406 **Maintenance requirements.** 

407 (a) Generally.

408 (1) Maintenance, repair and testing of these devices shall be made by certified 409 backflow/tester technicians. (Certified testers are those technicians who have completed a 410 state department of health and environment approved training course and have passed a 411 written examination such as the American Backflow Prevention Association device testers 412 examination.) The development services will also assure the proper installation of all 413 backflow preventers and will set appropriate testing intervals and testing standards for such 414 devices. Each backflow preventer shall be tested annually and shall be rebuilt as needed. 415 In cases where the degree of hazard is considered high, the development services division 416 may require the devices to be tested on a more frequent basis.

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(2) Certified tester/repair technicians. All certified tester/repair technicians shall be

418 re-certified at no less than three (3) year intervals and licensed with the city.

(b) *Notification*. The development services division shall notify the owner, or
authorized agent of the owner, of a building or premises in which there is found a violation
of this division, of such violation. The development services division shall set a reasonable
time for the owner to have the violation corrected. If the owner fails to correct the violation
within the specified time, the water division shall cease delivery of water to the fixture,
device, building or premises until the violation has been satisfactorily corrected.

425 Devices or assemblies installed, on or in a building's potable water system, for

426 protection against backflow or backsiphonage shall be maintained in good working

427 condition by the owner of the devices or assemblies. All devices or assemblies shall be

428 <u>maintained so they will be accessible for regular inspection and testing.</u>

429 The water superintendent may inspect devices or assemblies and if found to be

430 defective or inoperative shall require the repair or replacement thereof.

431 <u>Section 16</u>. That section 26-464, Automatic fire suppression, of The Code of the
432 City of Topeka, Kansas, is hereby repealed.

433 Automatic fire suppression systems.

All automatic fire suppression systems shall be protected from backflow with an
approved double check-valve assembly. Any fire suppression system into which chemicals
of any type (corrosive, antifreeze, etc.) can be added shall be protected at the service
connection with an approved reduced pressure principle assembly. In lieu of such
protection, an antifreeze loop may be individually protected with an approved reduced
pressure principle assembly, in addition to proper service line protection.
Section 17. That section 26-465, Reserved, of The Code of the City of Topeka,

441 Kansas, is hereby amended to read as follows:

## 442 Installation permit.

- A permit is required when a new or replaced backflow prevention device or assembly is installed. Before the placement of a backflow prevention device or assembly, the licensed plumber on new installation, and/or the certified backflow technician on replacements, shall obtain permits and inform the development services division that the device or assembly is being installed. After installation or replacement, a certified tester/repair technician will then test the device or assembly and register it with the water superintendent for scheduled testing.
- 450 <u>Section 18</u>. That section 26-466, Reserved, of The Code of the City of Topeka,
  451 Kansas, is hereby amended to read as follows:

## 452 <u>Notification</u>.

- 453 The water superintendent shall notify the owner, or authorized agent of the owner, of
- 454 <u>a building or premises in which there is found a violation of the provisions herein, of such</u>
- 455 violation and when the violation must be corrected. If the owner fails to correct the violation
- 456 within the specified time, the water superintendent may cease delivery of water to the
- 457 fixture, device or assembly, building or premises until the violation has been satisfactorily
- 458 corrected. The water superintendent shall notify owners or authorized agent of the owner.
- 459 of scheduled testing for each backflow device or assembly.
- 460 Failure to test a backflow device or assembly because of non-notification by the
- 461 water superintendent will result in loss of service until the device or assembly is properly
- 462 <u>tested.</u>
- 463 <u>A backflow device or assembly shall be rebuilt as needed.</u>
- 464 In the cases where the degree of hazard is considered high by the water
- 465 superintendent, the device or assembly shall be tested on a more frequent basis as

- 466 <u>determined by the water superintendent.</u>
- 467 The water superintendent shall have the right to test a device or assembly to insure
- 468 that it complies with the provisions herein.
- 469 <u>Section 19.</u> That original sections 26-446, 26-448, 26-449, 26-458, 26-459, 26-463,
- 470 26-464, 26-465 and 26-466 of the Code of the City of Topeka, Kansas, are hereby
- 471 specifically repealed.
- 472 <u>Section 20.</u> This ordinance shall take effect and be in force from and after its
  473 passage, approval and publication in the official city newspaper.

474	PASSED and APPROVED by the City Council July 8, 2008.	
475		CITY OF TOPEKA, KANSAS
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480		William W. Bunten, Mayor
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482	ATTEST:	
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487	Brenda Younger, City Clerk	