ORDINANCE NO. 2018-____ TURKEY CREEK REGIONAL SEWER DISTRICT CROSS-CONNECTIONS ORDINANCE

WHEREAS, there exists the potential for harm to the health, safety and welfare of the customers of the Turkey Creek Regional Sewer District ("District"), Indiana due to cross-connections with the District's water supply system; and

WHEREAS, it is in the best interest of the customers of the District, that certain rules and regulations be adopted and added to the District's current "use ordinance", formally known as Ordinance No. 2016-1 Turkey Creek Regional Sewer District Sanitary Use Ordinance, regarding cross-connections within the District's water supply system.

NOW, THEREFORE, BE IT ORDAINED by the District, that:

Section 31 entitled "Cross-Connection Control" shall be added as follows:

I. **DEFINITIONS**:

Unless the context specifically indicates otherwise, the meanings of the following terms as used in this Ordinance and as used in the rules and regulations adopted by the District implementing the provisions of this Ordinance are as set out below respectively. Terms used in this Ordinance but not defined in this Section shall have the same meaning as those terms found in any applicable statute, law, administrative rule or regulation under Indiana Law or if not found in any applicable statute, law administrative rule or regulation under Indiana Law, as those terms are commonly used by those engaged in the construction, operation, and management of a public water supply distribution system.

- a). <u>Air Gap</u> An unobstructed vertical distance through an atmosphere between the discharge end of a pipeline supplied from a public water supply and the overflow rim of the receiving portion of the customer's water system.
- b). **<u>Backflow</u>** The flow of contaminants into the public water supply distribution system from a source other than the public water supply.
- c). **Booster Pump** A pump installed on a pipeline to increase water pressure and flow.
- d). <u>Cross-connection</u> Any physical arrangement, including cross-connection control devices not in working order or not installed properly, whereby a public water supply distribution system is directly connected, either continuously or intermittently with any

secondary source of supply, sewer, drain, conduit, pool, piping, storage reservoir, plumbing fixture or other device which contains or may contain, and is capable of imparting to the public water supply, contaminants, contaminated water, sewage or other waste or liquid of unknown or unsafe quality.

- e). <u>Cross-connection Control Device</u> Any device or assembly approved by the District, Water Department, for construction on, or installation in water supply piping which is capable of preventing contaminants from entering the public water supply distribution system.
- f). <u>Cross-Connection Control Device Tester</u> A person who has successfully completed training in testing and inspection of cross connection control devices at an agency or school acceptable to the Commissioner (IDEM) who has registered with the Commissioner (IDEM) and has not been notified by the Commissioner (IDEM) or the District that his work is unacceptable under this Ordinance.
- g). <u>Cross Connection Hazard</u> Any customer's facility which, because of the nature and extent of activities on the premises or the materials used in connection with the activities or stored on the premises, would present an immediate or potential danger or health hazard to customers of the public water supply should backflow occur.
- h). **Customer** Any person who receives water from a public water supply.
- i). <u>Customer Service Line</u> The pipeline from the public water supply to the first tap, fixture, receptacle or other pint of customer water use; or the first secondary source of supply or pipeline branch in a building.
- j). <u>Customer Water System</u> All piping, fixtures and appurtenances including secondary sources of supply used by a Customer to convey water on his premises.
- k). <u>Double Check Valve Assembly</u> A device or assembly composed of two (2) tightly closing shut-off valves surrounding two (2) independently acting spring-loaded check valves, with four (4) test cocks, one (1) up stream of the four (4) valves and one (1) between each of the four (4) check and shut-off valves.
- l). **<u>Downstream</u>** The direction of flow when only the public water supply is supplying water through the customer water system and backflow is not occurring.
- m). <u>Pressure Type Vacuum Breaker</u> A chamber fitted with a spring-loaded air inlet for relieving a vacuum or partial vacuum in a pipeline.

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- n). <u>Pablic Water Supply</u> Any wells, reservoirs, lakes, rivers, source of supply, pumps, mans, pipes, facilities and structures through which water is obtained, treated as may be required, and supplied through a water distribution system to at least one hundred (100) persons per day for drinking, domestic or other purposes, including state owned facilities.
- o). Reduced pressure Principle Backflow Preventer A device composed of two (2) tightly closing shut-off valves surrounding two (2) independently acting spring-loaded pressure reducing check valves which in turn surround an automatic pressure differential relief valve and four (4) test cocks, one (1) upstream of the five (5) valves and one (1) between each of the four (4) check and shut-off valves. The check valves effectively divide the structure into three (3) chambers; pressure is reduced in each down-stream chamber allowing the pressure differential relief valve to vent the center chamber atmosphere should either or both check valves malfunction.
- p). <u>Secondary Source of Supply</u> Any well, spring, cistern, lake, stream or other water source, intake structure, pumps, piping, treatment units, tanks and appurtenances, used either continuously or intermittently, to supply water other than that from the public water supply to the customer, including tanks used to store water to be used only for firefighting, even though the water contained therein is supplied from the public water supply.
- q). **Supplier of Water** Any person who owns and/or operates a public water supply.
- r). <u>Upstream</u> The direction of flow opposite to downstream.

II. CROSS-CONNECTIONS PROHIBITED

- a) No customer shall cause or allow the construction or maintenance of a cross-connection. No customer shall cause or allow piping to be installed to by-pass a cross-connection unless the by-pass piping is also fitted with an approved cross-connection control device as outlined in this Ordinance.
- b) No customer shall cause or allow the installation or maintenance of a booster pump in a customer water system unless an approved control device is installed to prevent operation of the booster pump when pressure to pump suction drops below twenty (20) pounds per square inch, gauge.
- c) Customers constructing a new facility, making modifications to the customer service line or installing a higher capacity meter at an existing facility which are designated a cross-connection hazard as defined in Indiana Administrative Code §8-10-4 (c) or which

is designated as a cross-connection hazard or change of use that would be designated a cross-connection hazard by IAC 8-10-4 (c), shall construct an air gap or install a reduced pressure backflow preventer in accordance with Subsection III, herein, on the customer service line to the facilities so designated.

- d) No secondary water supply source can be connected to customer's building with a water distribution system unless a backflow device is installed on the service line.
- e) Customers shall construct an air gap, install a reduced pressure principle backflow preventer or install pressure type vacuum breaker on the water line connecting the public water supply to any land irrigation facility buried below ground which has a sprinkling outlet located less than six (6) inches above grade in accordance with Section III herein.
- f) All existing buildings which house a business activity and are operated as such, will be required to comply with this Ordinance upon the occurrence of any one of the following events:
 - i. New ownership of building;
 - ii. Remodeling;
 - iii. Change of occupancy;
 - iv. Installation of a new service line or upgrade of service;
 - v. Addition of machinery or chemicals;
 - vi. If backflow occurs
- g) All fire sprinkler systems must have an approved double check valve assembly installed prior to the installation of any fire sprinkler system. Any fire sprinkler system that uses chemicals must install a reduced pressure backflow preventer, pursuant to the District's specifications.
- h) All installations covered by this Ordinance must comply with the District specifications.

III. CONSTRUCTION AND INSTALLATION REQUIREMENTS FOR AIR GAPS FOR OTHER DEVICES

a) The discharge pipe of an air gap shall terminate a minimum of two (2) pipe diameters of the discharge pipe or six (6) inches, whichever is the lesser above the maximum record flood level or above the flood level rim of the receiving vessel, whichever is higher.

- b) Only those models of double check valve assemblies, reduced pressure principle backflow preventers or pressure type vacuum breakers approved by the District are acceptable.
- c) Reduced pressure principle backflow preventers shall be installed horizontally, with no plug or additional piping affixed to the pressure differential relief valve port, and with the pressure differential relief valve port a minimum of twelve (12) inches above floor level. Additionally, the device must be installed at a location where any leakage from the pressure differential relief port will be noticed, and that allows access to the device for maintenance and testing from floor level, so that it will not subject the device to flooding, excessive heat or freezing.
- d)All double check valve assemblies shall be installed horizontally at a location that allows access to the device for maintenance and testing from floor level and that will not subject the device to excessive heat or freezing.
- e) Pressure type vacuum breakers shall be installed as near as possible to the irrigation facility, at a location that allows access to the device for maintenance and testing from floor or ground level and that will not subject the device to excessive heat or freezing. Additionally, the device must be installed with its center line or datum point a minimum of twelve (12) inches above floor level; the highest downstream shut-off valve; and the highest downstream overflow rim or discharge point.
- f). The customer shall be responsible for any and all costs associated with the installation and maintenance of any pressure type vacuum breaker, reduced principle backflow preventer, or double check valve assemblies.
- g) The customer shall not remove any pressure type vacuum breaker, reduced principle backflow preventer or double check valve assemblies without prior written permission of the District.

IV. INSPECTION OF DEVICES; TIME LIMITS

a) The customer shall install and maintain in working order at all times any cross-connection control device or booster pump control device required hereunder. All cross-connection control devices must be tested in accordance with this Ordinance.

- b) To ensure that each cross-connection control device required is in working order, the customer shall have each device inspected or tested by a cross-connection control device tester at the time of construction or installation and at the following intervals in the following manner:
 - i. Air gaps shall be inspected at intervals not exceeding one (1) year to ensure that they continue to meet the requirements.
 - ii. Reduced pressure principle backflow preventers shall be tested at intervals not exceeding six (6) months to ensure that both check valves are drip tight under all pressure differentials and that the pressure differential relief valve will maintain pressure if the center changer at least two (2) pounds per square inch below that of the inlet chamber.
 - iii. Double check valve assemblies shall be tested at intervals not exceeding one (1) year to ensure that both check valves are drip tight under all pressure differentials.
 - iv. Pressure type vacuum breakers shall be tested at intervals not to exceed six (6) months to ensure that both check valves are drip tight under all pressure differentials.
 - The customer shall permit access to his premises by the inspector, the District and/or any supplier of water at reasonable times and upon presentation of identification, for inspection and monitoring of the customer's water system to insure compliance with this Ordinance, or testing of cross-connection control devices installed in accordance with this Ordinance.
- c) All cross-connection control device testers shall be registered with the Indiana Environmental Management Board.
- d) The testers shall report to the District on a form, provided by the District, the results of inspection or tests conducted pursuant to air gaps, reduced pressure principle, backflow preventers, double check valve assemblies and pressure type vacuum breakers. Reports shall be submitted to the District Water Department, the customer (and IDEM if they request one) within thirty (30) days of the inspection or test. Before the installation of all land irrigation devices or in-ground automatic sprinkling systems, permit must be obtained from the District Water Department. The permit fee shall be Ten Dollars (\$10.00).

V. FINES/VIOLATIONS

A violation of this Ordinance shall be subject to any and all remedies, fines and/or other sanctions detailed and outlined in Section 29. Administration and Enforcement of Ordinance No. 2016-1 Turkey Creek Regional Sewer District Sanitary Use Ordinance.

ALL OF WHICH IS ORDAINED TH	HIS	DAY	, 2018.
		EY CREEK REGIONAI D OF TRUSTEES	SEWER DISTRICT
	Rex A.	Heil, President	
	Dan M	ikolajczak, Secretary	
	Robert	Dumford, Trustee	
	Donald	l Dewitt, Trustee	
	James	Boone, Trustee	
	James	A. Young Sr., Trustee	_
ATTEST:	Keith (Ort, Trustee	
Dan Mikolajczak, Secretary			
Dan Himolajozak, Decietary			