Lucio M. Ternieden, Chief
Field Inspection Section
Drinking Water Branch
Office of Water Quality

March 19, 2018

Re: Inspection Summary Letter
Turkey Creek Regional Sewer District
PWSID IN5243032

Dear Mr. Ternieden,

In response to the February 20, 2018 Sanitary Survey Inspection and the resulting deficiencies, the Turkey Creek Regional Sewer District (TCRSD) proposes the following action.

Re: Deficiency - 327 IAC 8-2-8.2(e)(1)(B) states in part: For a PWS using ground water, in whole or in part, the following shall be evaluated for deficiencies: Activities or pollution sources in the sanitary setback area or immediate source water area that will cause risks.

TCRSD intends to increase the weed trimming and maintenance frequency to address the overgrowth of vegetation near the well. No chemicals will be used. Seasonal weather and site conditions sometimes limit access. TCRSD intends to address the vegetation by May 1st.

Re: Deficiency - 327 IAC 8-2-8.2(e)(7)(E)(ii) states in part: Deficiencies relating to system management and operations, including the following: Failure by the PWS to operate and maintain the water system in a manner to ensure providing water that meets all requirements of the Act (Title 42, U.S.C.A. 300F through 300j-26) and IC 13-18-16-6. Measures to meet these requirements must include having and implementing a written or otherwise documented approach for the following: Maintaining a record of system components, including information necessary to: (AA) operate; (BB) maintain; and (CC) repair; system components.

TCRSD intends to install (3) large landscape rocks in a triangular arrangement to provide physical protection and easy recognition of the well by equipment operators when performing site maintenance. Seasonal weather and site conditions sometimes limit access. TCRSD intends to address the barriers by August 1st.

Re: Deficiency - 327 IAC 8-2-8.2(e)(1)(G)(i)(AA) states in part: For a PWS using ground water, in whole or in part, the following shall be evaluated for deficiencies: (i) Location or condition of a well making it vulnerable to surface water runoff or flooding, including: (AA) elevation of casing not protected from a one hundred (100) year flood.

TCRSD intends to regrade and fill the low areas around the well that may be susceptible to pooling. Seasonal weather and site conditions sometimes limit access. TCRSD intends to address the grading issues at the same time they install the natural rock barriers by August 1st.

Re: 10 States Standards 2.18 states in part: Consideration must be given to the safety of water plant personnel and visitors. The design must comply with all applicable safety codes and regulations that may include the Uniform Building Code, Uniform Fire Code, National Fire Protection Association Standards, and state and federal OSHA standards. Items to be considered include noise arresters, noise protection, confined space entry, protective equipment and clothing, gas masks, safety showers and eye washes, handrails and guards, warning signs, smoke detectors, toxic gas detectors and fire extinguishers.

TCRSD has replaced the deficient sign. See attached photo #1&2.

Re: 10 States Standards 5.3 states in part: 1. Respiratory protection equipment, meeting the requirements of the National Institute for Occupational Safety and Health (NIOSH) shall be available where chlorine gas is handled 2. Shall be stored at a convenient heated location, but not inside any room where chlorine is used or stored. 3. The units shall use compressed air, have at least a 30 minute capacity, and be compatible with or exactly the same as units used by the fire department responsible for the plant. 10 States Standards 5.3.3 states in part: Where pressurized chlorine gas is present, continuous chlorine leak detection equipment is required and shall be equipped with both an audible alarm and a warning light. 10 States Standards 5.4 states in part: 1. Chlorine gas feed and storage shall be enclosed and separated from other operating areas. 2. The chlorine room shall be provided with a shatter resistant inspection window installed in an interior wall. 3. Constructed in such a manner that all openings between the chlorine room and the remainder of the plant are sealed. 4. Provided with doors equipped with panic hardware, assuring ready means of exit and opening outward only to the building exterior. 5. Each chlorine room shall have a ventilating fan with a capacity which provides one complete air change per minute when the room is occupied; where this is not appropriate due to the size of the room a lesser rate may be considered. 6. The ventilating fan shall take suction near the floor as far as practical from the door and air inlet, with the point of discharge so located as not to contaminate air inlets to any rooms or structures. 7. Air inlets shall be through corrosion resistant louvers near the ceiling. 8. Louvers for chlorine room air intake and exhaust shall facilitate airtight closure. 9. Separate switches for the ventilating fan and for the lights shall be located outside of the chlorine room and at the inspection window. Outside switches shall be protected from vandalism. A signal light indicating ventilating fan operation shall be provided at each entrance when the fan can be controlled from more than one point. 10. Vents from feeders and storage shall be screened and shall discharge to the outside atmosphere, above grade. 11. The chlorine room location should be located in a corner of the building on the prevailing downwind side of the building and shall be away from entrances, windows, louvers, walkways, etc. 12. Floor drains are discouraged. Where provided, the floor drains shall discharge to the outside of the building and shall not be connected to other internal or external drainage systems. 13. Where located near residential or developed areas and deemed necessary by the reviewing authority, provision shall be made to chemically neutralize chlorine gas before discharge from the water treatment plant building into the environment. Such equipment shall be designed as part of the chlorine gas storage and feed areas to automatically engage in the event of any measured chlorine release. The equipment shall be sized to treat the entire contents of the largest storage container on site. 14. Chlorinator rooms should be heated to 60o

F,and be protected from excessive heat. Cylinders and gas lines should be protected from temperatures above that of the feed equipment. 15. Pressurized chlorine feed lines shall not carry chlorine gas beyond the chlorinator room.

TCRSD has plugged the small holes identified during the inspection. See attached photo #3,4,5.

TCRSD feels the controlled space, surrounding barb wire fence and video surveillance are the best reasonable deterrent to vandalism. TCRSD may install video surveillance and signage as an additional deterrent to vandalism if deemed appropriate.

TCRSD has maintained a SCBA on site in the past. Proper certification of the equipment and personnel training became a burden and liability on the utility. In addition, multiple thefts have been a problem in the past and as a result the utility did not replace the unit after the second theft. In the absence of the unit, theft and vandalism has stopped.

TCRSD has been in contact with Fire Chief Mickey Scott of the Turkey Creek Fire Territory. The Turkey Creek Fire Territory operates Station #1 and Station #2 located in Syracuse, IN and both stations are staffed 24/7/365. TCRSD has outlined in their ERP that contacting the local emergency response team using the emergency 911 number is their best option for dealing with any emergency.
This information is supported by email correspondence dated January 19, 2018, see attachment 6.

TCRSD has reviewed with their engineer and IDEM to confirm that the current switching and location is acceptable. TCRSD intends to replace the existing switch with a unit that incorporates a signal light indicator for positive confirmation of power to the ventilating fan.

Re: Deficiency - 327 IAC 8-2-8.2(e)(6)(A) states in part: Deficiencies relating to monitoring, reporting, and data verification, including the following: The use of improper procedures or methods when conducting required on-site laboratory analyses.

TCRSD response As Noted: During the inspection it was discovered that the phosphate reagent being used for testing expired 01/18. TCRSD replaced the expired packets with fresh ones while the inspector was still on-site.

Deficiency - 327 IAC 8-2-8(a) states in part: Public water systems must collect total coliform samples at sites that are representative of water throughout the distribution system according to a written sample siting plan approved by the commissioner.

TCRSD has updated the graphics and information for improved clarity of their Site Sampling Plan (SSP) See Attachment 7,

It is our desire and intent to provide both safe drinking water and a safe working environment for TCRSD customers and staff. We hope this proposal is an acceptable solution to correct the deficiencies identified.

Sincerely,

Timothy S. Woodward
Turkey Creek Regional Sewer District.

New Chlorine Signage #1

New Chlorine Signage #2

Chlorine room wall patch #1

Chlorine room wall patch #2

Chlorine room wall pacth #3