

**TOWN OF JAMESTOWN
TOWN COUNCIL MEETING
for
TOWN, WATER AND SEWER MATTERS**

Monday, October 3, 2016

A regular meeting of the Jamestown Town Council sitting as the Board of Water and Sewer Commissioners was called to order at the Jamestown Town Hall, Council Chambers, 93 Narragansett Avenue at 6:43 PM by Commission President Kristine S Trocki.

The following members were present:

Mary E. Meagher, Vice-President
Blake A. Dickinson
Thomas T. Tighe
Michael G. White

Also present were:

Andrew Nota, Town Administrator
Wyatt Brochu, Esq., Town Solicitor
Michael Gray PE, Public Works Director
Christina D. Collins, Finance Director
Denise Jennings, Water and Sewer Clerk

AWARDS, PRESENTATIONS AND ACKNOWLEDGMENTS

(None)

READING AND APPROVAL OF MINUTES

1) 08/16/16 (regular meeting)

Motion was made by Commissioner Meagher, seconded by Commissioner White to accept the 08/16/16 regular meeting minutes. Motion so voted, 4 in favor; Commission President Trocki abstained. Commission President Trocki was absent from said meeting.

OPEN FORUM

1) Scheduled requests to address:

(None)

2) Non-Scheduled requests to address:

(None)

REPORT OF TOWN OFFICIALS

1) **Pumping Report:**

The Public Works Director reported the following:

- JR-1 well has been in operation since May. Staff is monitoring the groundwater elevation daily in the well to make sure that the pump is submerged.
- Pumping was down slightly for the month of August.
- Rainfall was down for the month of August and is 9 inches below average for the year.
- Transfer pumping was suspended, due to the level of the reservoir, which is below the spillway.
- North Reservoir was @ 23.5MG, usable storage-60MG
- South Pond is @ 4MG, usable storage-6MG

2) **Town project reports: (See Project Update Report dated September 2016)**

Treatment Plant:

The Public Works Director briefly outlined the water pretreatment process and reported the following:

- The Town was issued a violation by the RIDOH for an exceedance of a residual concentration of chlorine dioxide at the treatment plant and stated that he has provided a detailed report in the Commission's packets. **(See attached memorandum dated 09/29/16 from the Public Works Director to the Town Administrator)**
- This is a technical violation and is not on water that went out to the public.
- A drinking water notice was distributed on 09/23/16. The notice went out to all municipal water and sewer customers with their quarterly water and sewer bills.
- Historically, there has never been an issue such as this.
- The Town will need to provide a long term plan to the RIDOH, so that this does not happen again.

Transfer Pumping/Reservoir:

The Public Works Director reported the following:

- The Town received 1.6 inches of rain this past Saturday.
- RI continues to be in a drought situation.
- The reservoir does not usually return to full capacity until March.
- He meets with Steve Goslee, the former Public Works Director when he is in Town and that when Steve is concerned, he himself is concerned.
- He recently met with Mr. Goslee and discussed the level of the reservoir. Mr. Goslee felt that since we made it through October, that all should be okay and the reservoir should recover.

The Public Works Director stated that he and the Town Administrator are continuing to work with the Town of North Kingstown on getting a letter of memorandum for emergency use.

Administrator Nota stated that he needs to meet with Thomas Mulligan the Acting Town Manager of the Town of North Kingstown to discuss the agreement. Town Manager Mulligan would then need to bring this matter to his Town Council. Administrator Nota further stated that if approved, there will be a limited supply to the Town of Jamestown.

The Public Works Director briefly outlined the procedure for activating the temporary line and stated that he will schedule an exercise at Fort Getty with Water Department staff to deploy and test the piping reels used for the emergency interconnect to North Kingstown.

Nick Lapinski of 1 Hammett Ct. asked if evaporation was part of the problem with the reservoir level. The Public Works Director stated that the strong sun, was a factor with the water supply.

South Pond:

The Public Works Director reported the following:

- He has concerns regarding the growth of phragmites at South Pond, which has to be eradicated.
- He has been in contact with scientists at Solitude Lake Management, who have experience with invasive species management and environmental permitting.

LETTERS AND COMMUNICATIONS

(None)

UNFINISHED BUSINESS

(None)

NEW BUSINESS

- 1) RI Department of Health Violation: Chlorine Dioxide Maximum Residual Disinfectant Level Violations

(Previously reported)

- 2) Drinking Water Notice distributed 09/23/16

(Previously reported)

TOWN BUSINESS

(None)

ADJOURNMENT

There being no further business before the Commission, motion was made by Commissioner Meagher, seconded by Commissioner White to adjourn the meeting at 6:52 PM. So unanimously voted.

Attest:



Denise Jennings
Water and Sewer Clerk

XC: Commission Members (5)
Town Administrator
Town Solicitor
Public Works Director
Town Clerk

Project Update

September 2016

WELLS

JR-1, JR-3

- JR-1 has been in operation since May. We are monitoring the groundwater elevation in the well daily to make sure the pump is submerged. Ground Water levels have dropped by more than 20' since May.

TREATMENT PLANT

- The Town has been issued a violation by the RIDOH for an exceedance of a residual concentration of chlorine dioxide at the treatment plant. I have provided a detailed report that is attached.
- Staff has installed the conduit between the treatment plant and the raw water well and finished water well for the installation of the new wiring and controls for the pumps.

TRANSFER PUMPING/RESERVOIR

- Water transfer was suspended when the water level dropped below the spillway.
- I have been in contact with scientists at Solitude Lake Management who assisted us with the Round Marsh (Zeeks Creek) improvement project with the conservation commission. I am concerned with the growth of phragmites at South Pond. They are experienced with invasive species management and environmental permitting.
- Now that Fort Getty has closed we will schedule an exercise of the hose reels and flexible piping that is used for the emergency interconnect with North Kingstown. All three reels will be deployed at Fort Getty and tested. Each reel has more than 2,500 linear feet of 6" piping.

DISTRIBUTION SYSTEM

South Pond @ 4 MG

Usable Storage, 6 Million Gallons

North Pond @ 23.5 MG

Usable Storage 60 Million Gallons

- The water department completed service installations on Racquet Road.

WASTEWATER TREATMENT PLANT

- The monthly average daily flow at the treatment plant for September was 0.14 million gallons per day. The peak daily flow was 0.225 million gallons. The permitted flow for the monthly average is 0.73 million gallons per day.
- There were no SSO's for the month of September.

**Town of
Jamestown, Rhode Island**

PO Box 377
Jamestown, RI 02835- 1509
Phone: (401) 423-7220
Fax: (401) 423-7229



Date: September 29, 2016

To: Andrew Nota
Town Administrator

From: Michael Gray
Public Works Director

RE: RIDOH - Notice of Violation
Chlorine Dioxide CLO2

Raw water from North Pond flows through a 7,500-foot long 10" transmission main to the Jamestown Water Treatment facility. The water receives pretreatment from a chemical feed system located in a building at South Pond that feeds Chlorine Dioxide directly into the main to treat the raw water prior to it entering the treatment facility at North Road. Chlorine dioxide is highly soluble in water and is effective at disinfection and improving color, odor, and taste. The pretreatment facility was constructed in 1991 and has been in full operation since that time. The dosage of chlorine dioxide is flow paced and has remained relatively constant from that time. Attached is a figure showing the location of the pretreatment facility.

Water samples are collected from the tap within the lab at the treatment facility as "the first customer" for the treated water that is delivered to the distribution system. The water is analyzed to determine the chlorine dioxide residual concentration as required by the RIDOH drinking water regulations. Historically residual concentrations range between 0.0 and 0.2 milligrams per liter (mg/l), well below the maximum residual detection limit (MRDL) of 0.8 mg/l as set by the EPA. Tests are performed daily and logged by staff at the water plant. The superintendent records the lab data on the required RIDOH forms and provides me a copy to be submitted to the RIDOH at the end of every month.

On September 21, 2016 I received an email from the RIDOH staff that a review of our monthly reports found that we had an exceedance of the MRDL threshold of 0.8 mg/l for chlorine dioxide on April 17, 2016 where the concentration was reported at 0.951 mg/l and on May 1, 2016 with a concentration of 1.231 mg/l. In event that there is an exceedance, the superintendent is required to contact the RIDOH and they must collect three samples on the following day at 0 hour, 6 hours, and 12 hours and report the

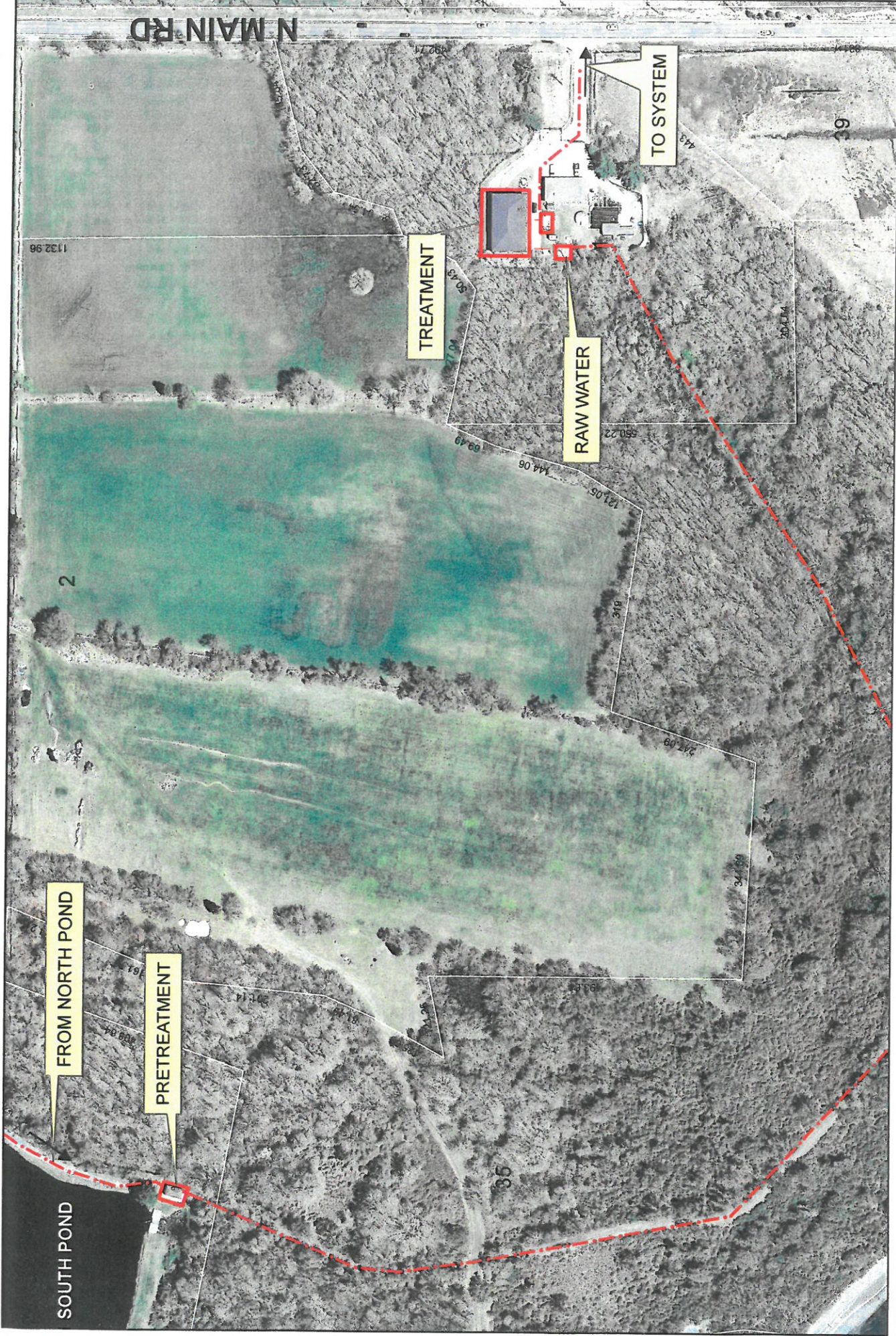
concentrations. If the samples are below the 0.8 mg/l then there is no exceedance of the standard. If any one of the (3) samples collected exceeds the MRDL of 0.8 mg/l then there is a Tier 1 Violation requiring immediate public notice.

On April 18th, the day after the first exceedance only one sample was collected which had residual concentration of 0.514 mg/l. On May 2nd after the second exceedance one sample was collected which had a residual concentration of 0.0 mg/l. Although both follow-up samples were below the MRDL of 0.8 mg/l, the Town failed to take the additional samples as required and the regulations treat it as an exceedance and a violation. I have attached the NOV issued by the RIDOH and the Drinking Water Notice that has been mailed to all the water customers. Until this event there has not been an exceedance of this standard.

The superintendent took immediate steps to reduce the levels of chlorine dioxide residual after the May 1st event by turning off the chlorine dioxide generator at the South Pond Facility until they had determined the cause of the problem. Staff found an issue with the chemical feed pump and parts were subsequently replaced and the system was placed back on line. Since that time there has not been a problem with the system and residual concentrations are back within historical ranges. It is important to note that with the generator off, chlorine dioxide cannot be dosed into the main therefore any additional samples would have resulted in a residual concentration of 0.0 mg/l.

The chlorine dioxide facility is for pretreatment of the raw water to improve water quality and to assist with the effectiveness of the treatment plant to filter the water. The system was designed for a specific quantity of chemical for the volume of water that flows to the plant and the detention time between south pond and the treatment building. Chlorine Dioxide is not used for disinfection of treated water that is delivered to our customers. After filtration the finished water is disinfected with a liquid chlorine at the treatment plant prior to pumping water into the distribution system. We are required by the RIDOH to maintain a residual chlorine concentration throughout the system and staff monitors the distribution system by collecting water samples daily.

I have reviewed the NOV with the staff and our responsibilities for sampling and proper notification of any exceedance of a standard that may pose a risk to public health. We will be reviewing the pretreatment facility with our process engineer to determine if we can monitor chlorine dioxide in real time through our SCADA (Supervisory Control and Data Acquisition) system.



N MAIN RD

FROM NORTH POND

PRETREATMENT

TREATMENT

RAW WATER

TO SYSTEM

SOUTH POND



Water Treatment System Jamestown, RI

Legend

- Tax Parcels

1 inch = 200 feet





Department of Health

Three Capitol Hill, Room 209
Providence, RI 02908-5097

TTY: 711

www.health.ri.gov

phone: (401) 222-6867
Fax: (401) 222-6953

CERTIFIED MAIL

PWS# RI1858419
Jamestown Water Department
Michael Gray
93 Narragansett Avenue
Jamestown, RI 02835

September 21, 2016

SUBJECT: NOTICE OF VIOLATION – Chlorine Dioxide Maximum Residual Disinfectant Level Violations

Dear Michael Gray:

The Jamestown Water Department public water system failed to collect, analyze, and report three distribution samples the day following the Maximum Residual Disinfectant Level (MRDL) exceedance for chlorine dioxide on April 17, 2016 and May 1, 2016 as required in Section 7.5(c)(2) and 7.6(c)(2) of the Rules and Regulations Pertaining to Public Drinking Water (Regulations). On April 17, 2016 the chlorine dioxide concentration was 0.951 mg/L and on May 1, 2016 the concentration was 1.231 mg/L. The Maximum Residual Disinfectant Level is 0.8 mg/L.

This failure results in two Tier 1 violations of the Regulations and requires the public water system to provide the public notice in accordance with Section 16.8(2). The Regulations further provide, as detailed in Section 16.8(2), that the notice be posted in conspicuous locations throughout the distribution system frequented by persons served by the system or by mail or other direct delivery to each customer and service connection (where known); and by any other method reasonably calculated to reach other persons regularly served by the system. If all persons served can be reached with the first method chosen, then additional methods of distribution need not be used.

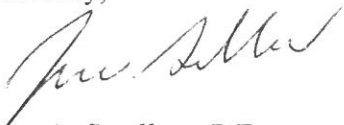
The required public notice has been emailed to you. The water system must submit certification to this office that it has fully complied with the public notification regulations. A Certification of Public Notice form for this purpose has been enclosed. This form, along with a copy of the public notice, must be submitted to this office within 10 days of completing the public notification. If the public notice is posted, it must remain in place for as long as the violation persists, but in NO CASE LESS THAN SEVEN DAYS EVEN IF THE SITUATION IS RESOLVED.

In addition, the following corrective actions are required:

- Review of all practices and processes that may have contributed to the MRDL exceedances, along with proposed corrective actions, presented in a report to be submitted to the DWQ on or before October 14, 2016;
- Submittal of chlorine dioxide data (Table 7) for July, August and September (as of Sept. 22, 2016) by Sept. 23, 2016;
- Review of the EPA guidance document entitled "Complying With the Stage 1 Disinfectants and Disinfection Byproducts Rule: Supplement A – One of the Simple Tools for Effective Performance (STEP) Guide Series -- For Small Systems adding Chlorine Dioxide or Ozone";
- Training for personnel as to the requirements for monitoring (described below) and notification to RIDOH for MRDL exceedances;
- In the future, if the daily routine chlorine dioxide monitoring result exceeds the MRDL, the following day take three chlorine dioxide distribution system samples as close to the first customer as possible, at intervals of at least six hours, in addition to the sample required at the entrance to the distribution system, in accordance with 7.5(c)(2).

Your cooperation regarding this matter is essential. If this Department can be of assistance, or if you have any questions, please contact Angela Harvey at (401) 222-6867.

Sincerely,



June A. Swallow, P.E.
Chief
Drinking Water Quality

JAS:AP
Enclosures

cc: Angela Harvey 
Amy Parmenter
Steven Boudreau
Melissa Orpen-Tuz

CERTIFICATION OF PUBLIC NOTICE

PWS# RI1858419
Michael Gray
Jamestown Water Department
93 Narragansett Avenue
Jamestown, RI 02835

Stage 1 DBPR Chlorine Dioxide MRDL Violations
Dated: September 21, 2016

The public water system indicated above hereby affirms that **the required public notice** has been provided to consumers in accordance with the delivery requirements and within the required timeline established in the Rules and Regulations Pertaining to Public Drinking Water, Section 16.8 or Section 17.6 entitled Public Notification.

The following dates must be provided for all checked items:

- _____ Consultation with the State on _____.
- _____ Notice distributed by Posting** on _____.
- _____ Notice distributed by Hand Delivery on _____.
- Notice distributed by Mail on _____.
- _____ Notice distributed by Newspaper* on _____.
- _____ Notice distributed by Radio and TV on _____.

Signature of Official in Charge: _____

Date: _____

*A copy of the newspaper article and proof of publication date must accompany this certificate.

**If you post a notice, it must remain posted for as long as the violation or situation persists.
In no case can this notice be posted for less than 7 days.

DRINKING WATER NOTICE

This notice is to inform you of a violation that was issued to the Jamestown Water Department by the Rhode Island Department of Health (RIDOH) on September 21, 2016.

Water entering the plant from the Town's reservoir is treated with small amounts of chlorine dioxide to improve water quality and to keep bacteria and other organisms out of your drinking water. Samples are collected daily to make sure that chlorine dioxide residual levels (MRDL) are below 0.8 milligrams per liter (mg/L), which is the limit set by the Environmental Protection Agency (EPA). Any exceedance of this standard requires 3 follow-up tests to be conducted the next day.

A sample collected at the treatment plant on April 17, 2016 measured chlorine dioxide at 0.95 mg/L and a sample collected on May 1, 2016 measured chlorine dioxide at 1.23 mg/L. Jamestown Water collected only one follow-up sample after each exceedance. The sample result for April 18, 2016 measured 0.514 mg/L and the sample result for May 2, 2016 measured 0.0 mg/L. Although the follow-up samples were below the standard of 0.8 mg/L, the Town failed to take the additional samples that were required. Out of an abundance of caution, missed samples are treated like exceedances of the 0.8 mg/L limit.

It was later determined that a mechanical problem with the chlorine dioxide generator caused the exceedances. There have been no exceedances since it was repaired on May 5, 2016.

What does this mean?

The chlorine dioxide violations reported today include exceedances of the EPA standard within the distribution system which delivers water to consumers. Violations of the chlorine dioxide standard within the distribution system may harm human health based on short-term exposures. Certain groups, including fetuses, infants, and young children, may be especially susceptible to nervous system effects from excessive chlorine dioxide exposure. There are no obvious symptoms, but chlorine dioxide can affect development of the nervous system. Adults who are not pregnant and older children are not typically affected because their nervous systems are already developed. However, if you have specific health concerns you may wish to contact your doctor.*

For more information, please contact Michael Gray at 401-423-7225 or Jamestown Water Department, 93 Narragansett Avenue, Jamestown, RI 02835.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by Jamestown Water Department. State Water System ID#: 1858419.

Date distributed: 9/23/16.