

## DOWN THE PIPELINE

MARCH 30, 2017

## INSIDE THIS ISSUE:

EQ BIOSOLIDS

WATERS OF  
THE US RULE

1

CORROSION  
IN CONCRETE  
PIPES

2

SEWER USE  
ORDINANCE

2

ECONOMIC BENE-  
FIT OF NON COM-  
PLIANCE?

2

SIU SAMPLE  
EVENTS

2Q17

3

## Exceptional Quality Biosolids Draft Permit Report

DEQ has been developing over the past several months a major distribution and marketing (D&M) permit for exceptional quality (EQ) biosolids that would allow for bulk application on agricultural fields. DEQ views this permit as a template that would be issued for 2 years as a pilot. They may then be interested in using the lessons learned from the pilot experience to develop a general permit for other EQ biosolids generators.

DEQ has been working with the Virginia Association of Municipal Wastewater Agencies (VAMWA). DEQ seemingly envisions a specialized regulatory mechanism for EQ biosolids, all of which is of extreme interest to municipalities that are or will be creating EQ biosolids at their treatment facilities. If the regulatory mechanism is too heavy-handed then the motivation to invest money to create exceptional quality biosolids will be damped significantly.

At this time DEQ appears set on requiring the same restrictions on the land application of EQ biosolids as they do with Class B biosolids.



If this is true, what are the benefits going to be to producing EQ biosolids? That is a question that has no clear answer at this time.

Currently the state has one specific regulatory section that applies to distributing and marketing biosolids, 9VAC25-32-570. VAMWA has been working to keep things simple, clear, and necessary. This section only requires a nutrient management plan for bulk use of EQ biosolids.

## ACTION TO REVISE "WATERS OF THE US" RULE



President Trump issued an executive order February 28 directing EPA and the Army Corps of Engineers to conduct a review of the ruling issued on June 29, 2015.

This ruling was quite controversial in that it clarified the

existing scope of Clean Water Act jurisdiction over non-navigable water features. What was controversial was that the scope was being increased, not simply clarified.

If this ruling remains unchanged then any wetland or

stream that meets the test of "significant nexus" will be deemed a US water and EPA will have jurisdiction. It will not matter how permanent the water feature is, only that it meets the test criteria.

## CONQUERING CORROSION IN CONCRETE PIPES

Sulfuric acid poses a danger to people working in collection systems. It can attack throats, lungs, eyes, and skin. Two municipal workers in Texas died earlier this year due to H<sub>2</sub>S exposure.

*Thiobacillus* bacteria, under anaerobic conditions, oxide hydrogen sulfide gas

to form sulfuric acid . This is what can happen inside of collection system piping under the proper conditions. Concrete that is exposed to this substance rather quickly erodes. The structural damage leads to pipe failures, pump station structural failures, and even concrete damage at treatment plants.

The “attack” upon the piping typically happens at force main discharges, areas of turbulent flow, and any other area conducive to the release of H<sub>2</sub>S from wastewater.

Prevention comes from keeping system conditons aerobic. If not, then chemical additives must be employed.



## SEWER USE ORDINANCE

The recently revised sewer ordinance for the county was reorganized to provide an easier time of locating specific items of interest.

The purpose of the ordinance establishes uniform requirements for all Users of any of the publicly owned treatment works owned/ operated by the Bedford Regional Water Authority.

Its objectives are to prevent

introduction of pollutants into the collection systems and treatment plants in the county that will interfere with their operation; to prevent any “pass through” of pollutants at said plants; to protect both plant personnel and the general public; to promote reuse and recycling of wastewater and biosolids; to provide fees for equitable distribution of the

cost of operation, maintenance, and improvement of all of the treatment plants and; to allow the Water Authority to comply with its state discharge permits.

Section 18-2 of the Ordinance provides a list of prohibited discharge standards that apply to all Users. There are also national categorical standards as well as local limits.

**“The purpose of the ordinance establishes uniform requirements for all Users.”**

## ECONOMIC BENEFIT OF NON COMPLIANCE?

A company must usually spend money to comply with pretreatment standards /requirements. By delaying or avoiding these costs, the company realizes an economic advantage or benefit over a competitor which complies with those requirements.

These benefits can be measured by: the amount money the company expected to earn by delaying the purchase of pretreatment equipment, the annual costs that they avoid, and the expected return on avoided costs while non compliant; any competitive advantage they may gain,

such as increased market share over their competitors gained due to delaying compliance.

Pretreatment enforcement determines what severity of monetary penalties is required to remove these economic benefits of remaining in non compliance.



**Find us on the Web!**

**www.brwa.com**

**BEDFORD REGIONAL  
WATER AUTHORITY**

Central WWTP  
852 Orange Street  
Bedford, VA 24523

Eric Rajaniemi  
Pretreatment Coordinator  
Phone: 540-586-7679, ext. 105

Executive Director: Brian Key,

Assistant Director: Nathan Carroll

Maintenance Manager: Bert Smith

Operations Manager: Michael Ramsey

Smith Mountain Lake Utilities Manager: William Wood



**" P R O V I D I N G Q U A L I T Y S E R V I C E T O E V E R Y O N E "**

**2017 SECOND QUARTER SIU SAMPLE EVENTS**

Here is a reminder to contact your contract laboratory early in order to schedule them to come and conduct a sample event at your facility.

Please be sure that the laboratory has an up to date sample schedule from your permit as well as a copy of the local limits. Why the local limits? Asking the lab to copy the limits into their data base allows them to list the appropriate limit to parameters in the analysis report. This in turn allows you to quickly see if you have a parameter violation

or not.

Make sure your analysis report does not include "less than" or "greater than" estimated values for parameters such as BOD, TSS, COD, and mercury. If your limit for mercury is 0.0004 mg/l your report can not state that mercury was < 0.001 mg/l. You can't know if you were compliant with the limit or not.

Make sure the chain of custody form is filled out completely, correctly, and has been signed/dated properly.

