# MINUTES UNIVERSITY AREA JOINT AUTHORITY 1576 SPRING VALLEY ROAD STATE COLLEGE, PA 16801 Regular Meeting – May 18, 2016

#### 1. Call to Order

Mr. Schmalz, Chairman, called the scheduled meeting of the University Area Joint Authority to order at 4:01 p.m. Wednesday, May 18, 2016. The meeting was held in the Board Room in the office of the Authority with the following in attendance: Messrs. Dempsey, Ebaugh, Guss, McShea, Nucciarone and Schmalz; Cory Miller, Executive Director, Dave Smith, Assistant Executive Director; Mark Harter, Collection System Superintendent; Art Brant, Plant Superintendent; Jason Brown, Project Manager; David Gaines, Solicitor; Ben Burns and Tom Holleran, Consulting Engineers; Jason Wert, RETTEW; Autumn Randle and Jim May, COG; Mark Whitfield, State College Borough; Sharon Bressler; Tom Songer, Laura Dininni, Al Matyasovsky; Brian McCall and Joe Minich, Maher Duessel; and Kathy Wheeler, Recording Secretary.

# 2. Reading of the Minutes

# 2.1 UAJA Regular Meeting – April 20, 2016

# UAJA Meeting Minutes Approved

A motion was made by Mr. McShea, seconded by Mr. Dempsey, to approve the minutes of the UAJA meeting held on April 20, 2016 as corrected. The motion passed unanimously.

#### 3. Public Comment

Mr. Songer read the following email chain into the minutes:

Email from Dennis Lingenfelter, PE to Tom Songer dated April 21, 2016.

Hi Tom,

Please find attached a copy of PA Code 73.17. This code was developed to address discharges to on-lot sewage system and is generally recognized as overestimating the flows and corresponding BODs for respective users, which is a reasonable approach because on-lot systems do not respond as well as community systems in regard to fluctuations in hydraulic/organic loadings...hence there is a need to generally oversize on-lot facilities. Nonetheless, it has been used for many years by municipalities and authorities as being a reliable data source for community systems. The reason such information has stood the test of time in regard to BOD loadings is the fundamental difficulty of reliably measuring BOD contributions from relatively small users such as homes, restaurants, and offices. Accordingly, since water usage is easily monitored (when water metering is in place), it is generally recognized as the "gold standard" for tapping fees and user charges for both water and sewer. Water usage may not be the perfect standard but it is much better than assigning categorical BOD loadings based upon data that was developed over 50-years ago. One size does not "fit" every categorical user. UAJA may be unique in planning to adopt organic loadings as a basis for tapping fees per se...I am not familiar with any other municipality or authority that is doing or planning such an procedure. It should be a rough road to implementation.

If you are going to charge a use for BOD loading then you should have to sample the waste stream coming from that customer and determine the BOD loading. How are you going to charge:

- 1. A car wash-there shouldn't be any BOD coming out of a car wash.
- 2. A restaurant
- 3. A medical office building
- 4. A school
- 5. A convenience store
- 6. A church

As far as we know no other sewer authority in the state uses BOD loading to determine tapping fees. Your consultant Adrienne Vicari, PE of HRG stated that none of her clients have ever used organic loading as a basis for charging tapping fees. As I stated at the last UAJA meeting if you know that a user such as a food processor does generate a lot of BOD then it is appropriate to charge that customer an additional tapping fee and user fee for their higher than normal organic loading. The UAJA rate resolution provides for this. Per UAJA Chapter 94 Report for 2014 states the following:

a. Hydraulic Loading: The UAJA plant has a permitted hydraulic design capacity (maximum monthly design flow) of 10.62 MGD according to our Part II permit issued under Chapter 91. The annual average flow in 2014 was 4.90MGD.

b. Organic Loading: The organic design capacity of the UAJA plant according to our Part II permit issued under Chapter 91 is 50,000 pounds of BOD per day. During 2014, the annual average organic loading to the wastewater treatment plant was 13,383 pounds of BOD per day. The peak month organic loading of 16,545 pounds of BOD per day was recorded in November of 2014. The peak organic loading to average daily loading for 2014 was calculated to be 1.20.

As is evidenced by the above UAJA has almost 37,000 pounds per day of excess capacity in terms of Organic Loading.

Why doesn't UAJA agree to do what the Act 57 legislation calls for and what the current UAJA Act 57 study that is dated 2005 calls for which is to charge a non-residential customer based on estimated flow. Act 57 is the law and the 2005 Act 57 Study is what should be followed.

Again I would like to request that a special committee of 3 people from the UAJA Board along with Pat Ward, Steve Balkey and myself meet to discuss our concerns. My attorney, Scott Wyland has asked in correspondence to your attorney, Dick Campbell, that we meet. Please let me know if the board is willing to have such a meeting and if you are not willing to meet then why is that?

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From: Cory Miller [mailto:crmiller@uaja.com] Sent: Thursday, April 21, 2016 10:07 AM

To: Tom Songer II <tfsonger@torrongroup.com<<u>mailto:tfsonger@torrongroup.com</u>>>

Subject: Tapping Fees based on BOD

#### Tom.

You were questioning last night at the UAJA Board meeting how a BOD tapping fee might be fairly determined for a non-residential connection. We are not even close to having a completed methodology, but I can give you an example based on your office building which is expected to have 20 employees.

A single family home is 0.38 lbs BOD, so that is 1 EDU.

According to the PA Code, 73.17, an office is expected to contribute 0.06 lb BOD per employee. So, taking 20 employees x 0.06 lb we get 1.2 lbs BOD.

Divide 1.2 by 0.38 we get 3.1579 EDU, which we would round down to 3 EDUs. Obviously, based on this, we are under charging for office buildings based on our current use of 10 employees per EDU.

Obviously, the same calculation would be applied to determining quarterly billing.

I would be happy to have your input on the development of the tables for number of EDU's based on BOD.

Cory Miller Executive Director University Area Joint Authority (814) 238-5361

Mr. Schmalz informed Mr. Songer that his attorney should correspond with the Authority's solicitor and that other customer groups need to be involved in discussion and not just one group. Mr. Songer will have his attorney contact the Authority's solicitor.

#### 4. Old Business

#### 4.1 2015 Audit

The 2015 draft audit was included in the meeting packet and Mr. McCall of Maher Duessel reviewed their findings with the Board.

2015 Audit Approved A motion was made by Mr. Guss, seconded by Mr. McShea, to approve the 2015 Audit. The motion passed unanimously.

# 4.2 Fiber Optic Study

The Centre Region Council of Governments is considering a study to determine the costs of developing a fiber optic system for the Centre Region. UAJA staff has indicated that UAJA will share in the cost of the study. The potential benefit to UAJA is great, with cheaper, more reliable connections to several of our pump stations and the plant site likely. The UAJA share of the study will be funded from the Information Technology budget. The approximate cost of the study is \$2,000.

# 4.3 Nutrient Management Presentation

UAJA is working with the Centre Region Planning Agency to develop a nutrient management plan to provide nutrient capacity to UAJA. Act 537 requires municipalities to plan for capacity needs. In the Centre Region, historically determining how to provide capacity has been a cooperative project involving UAJA and the Centre Region Council of Governments. The Nutrient Management Plan will ultimately describe the methods UAJA is to use to meet the nutrient capacity requirements, as well as how to pay for the capacity.

Much information has been gathered, and a list of alternatives is nearing completion. Jason Wert of Rettew Associates will present information about the status of the nutrient trading market, treatment options at UAJA, and alternatives involving nutrient offsets and credits.

At the May meeting of the COG Public Services and Environmental Committee, it was suggested that a joint work session of the committee and UAJA board be scheduled during June.

# 4.4 Resolution To Participate In The PennVest Nutrient Auctions

In 2015, UAJA spent \$290,000 to purchase Carbon to reduce Total Nitrogen (TN). The cost per pound of TN reduction varies based on conditions, but is between \$2.50 and \$3.50 per pound removed. There will be several nutrient trading auctions through PennVest between now and the end of the water year. The first one is June 8.

If TN credits can be purchased through the auction, then UAJA can reduce or eliminate the Carbon addition. To participate in the auction, PennVest requires a resolution by the Authority.

Resolution to Participate in the Penn Vest Nutrient Auctions Approved A motion was made by Mr. Ebaugh, seconded by Mr. Dempsey, to adopt the Resolution to participate in the PennVest Nutrient Auctions as presented. The motion passed unanimously.

#### 5. New Business

#### 5.1 Requisitions

BRIF #219	Lake Chevrolet 2016 Ford F-150 (Unit 28)	\$27,823.00
BRIF #220	Dale Summit Acquisitions May 2016 Lease Payment	\$25,000.00
BRIF #221	L/B Water Service, Inc. Pipe and Fittings Suburban Backlot Project	\$17,675.90

# Requisitions Approved

A motion was made by Mr. McShea, seconded by Mr. Guss, to approve the BRIF Requisitions #219-221. The motion passed unanimously.

Revenue Fund #144

Debt Service, Operating and Maintenance Expenses

\$1,000,000.00

Requisition Approved A motion was made by Mr. Nucciarone, seconded by Mr. Ebaugh, to approve the Revenue Fund #144 Requisition. The motion passed unanimously.

# 6. Reports of Officers

6.1 Financial Report

Mr. Smith reviewed with the Board the YTD budget report for the period ending April 30, 2016.

6.2 Chairman's Report

None.

6.3 Compost & Septage Operations Report

The following comments are as presented to the Board in the written report prepared by Jason Brown, Project Manager.

COMPOST PRODUCTION AND DISTRIBUTION

	Nov. 2015	<u>Dec. 2015</u>	<u>Jan. 2016</u>	Feb. 2016	<u>Mar. 2016</u>	Apr. 2016
Production	898 cu/yds.	962 cu/yds.	927 cu/yds.	706 cu/yds.	694 cu/yds.	657 cu/yds.
YTD. Production	7,865 cu/yds.	8,827 cu/yds.	927 cu/yds.	1,633 cu/yds.	2,327 cu/yds.	2,984 cu/yds.
Distribution	844 cu/yds.	439 cu/yds.	424 cu/yds.	618 cu/yds.	898 cu/yds.	835 cu/yds.
YTD. Distribution	8,418 cu/yds.	8,857 cu/yds.	424 cu/yds.	1,042 cu/yds.	1,940 cu/yds.	2,775 cu/yds.
Immediate Sale	845 cu/yds.	1,304 cu/yds.	1,842 cu/yds.	2,151 cu/yds.	1,989 cu/yds.	1,794 cu/yds.
Currently in Storage	1,743 cu/yds.	2,266 cu/yds.	2,769 cu/yds.	2,857 cu/yds.	2,683 cu/yds.	2,451 cu/yds.

SEPTAGE OPERATIONS

	Nov. 2015	<u>Dec. 2015</u>	Jan. 2016	Feb. 2016	Mar. 2016	Apr. 2016
Res./Comm.	0 gals.	0 gals.	0 gals.	0 gals.	14,800 gals.	0 gals.
CH/Potter	5,258.37	7,447.62	4,657.89	6,138.24	7,697.82	7,643.61
	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids
Port Matilda	1,217.64	1,668.00	1,517.88	1,501.20	1,601.28	1,684.68
	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids
Huston Twp.	400.32	0	1,000.80	767.28	800.64	1,034.16
	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids
Total Flow	62,500 gals.	72,500 gals.	61,500 gals.	75,500 gals.	86,800 gals.	67,500 gals.

# 6.4 Plant Superintendent's Report

The following comments are as presented to the Board in the written report prepared by Art Brant, Plant Superintendent.

# **Plant Operation**

The treatment plant is operating well one exception to our NPDES permit. We recorded a low D.O. (4.0mg/l) on the Effluent on April 15<sup>th</sup>, 2016. The 12-month rolling average flow for April was 4.15mgd with the average for the month being 4.14mgd. The average monthly **influent** flow was 5.60mgd. There were no plant inspections this month.

Treatment units on line are as follows: primary clarifiers #4, #5 and #6; aeration basins #1 and #2; secondary; clarifiers' #2, #3, and #4; eight tertiary filters.

Below is the chart for Reuse Distribution and Temperature Data:

	Apr-16	YTD	Plant Effl, Temp	Wetland Effl. Temp.
Best Western	29,000	98,000		_
Centre Hills	2,166,000	2,166,000	Apr-16	Apr-16
Cintas	726,000	3,068,000	61.2	57.5
Red Line	336,000	1,634,000		
Uaja Wetland	4,919,000	15,438,000		
Wetland Vault	14,485,000	41,977,000		
Kissingers	1,230,000	4,328,000		
Stewarts	0	0		
TOTAL	23,891,000	68,709,000		

# Plant Maintenance

- Replaced a yard hydrant at the Maylie property.
- Replaced motor and blower bearing, temperature probes and seals in Continental Blower
   #3.
- Repaired the skimmer arm on Secondary Clarifier #1.
- Retro fit cooling fans in the VFD for the Main Station Pump #1. The Drives at the Main are obsolete and will be put in next year's budget for replacement.
- Removed a tree and repaired the security fence near the wetlands.
- Installed a flow data logger at GDK Wetlands.
- Replaced the membranes on MF #1 and rebuilt an actuator on MF #3.
- Cummins serviced and performed a load bank test on the generators at the Plant and Main Station.
- Replaced the plastic wear liner in the Long Auger.
- Replaced the gearbox on Polymer Tank #2.
- Replaced the tines on the Composters.
- Replaced the drive roller at the top of the Long Belt.
- Replaced the agitator head chains on Composter #1.
- A power monitor for the D/W power Distribution Panel was connected to SCADA. Trending the power quality should help identify the electrical issues at that building.

# 6.5 Collection System Superintendent's Report

The following comments are as presented to the Board in the written report prepared by Mark Harter, Collection System Superintendent.

#### **Mainline Maintenance:**

Lateral Repairs (4) – 2095 N. Oak Lane, 2028 Muncy Road, 260 W. Pine Grove Road, 101 W. Aaron Drive.

Mainline Repairs (3) – 442 Sylvan Dr., 300 Puddintown Road. West Cherry Lane.

Mainline Cleaning – (64) manholes inspected / (10,484) ft. of mainline cleaned.

Mainline Televising for new construction - (1127) ft. televised (6) manholes inspected.

Mainline Brushing R.O.W. - Big Hollow Interceptor.

Casting Repairs – (13) Harris Twp. / (1) UAJA Plant.

Suburban Back lot project – started clearing R.O.W.

Assisted plant maintenance - with hydrant installation, cleaning headworks, and compost building work.

#### Lift Station Maintenance:

Pump Station Generators were serviced.

Repaired (2) E-One Pump Cores.

Cleaned (10) lift station Wet Wells.

Installed new UPS at Clasters, North and South meter chambers.

Tested high water floats at all pump stations.

Repaired Astro discharge gauge at Scott road station.

# **NEXT MONTH PROJECTS:**

Suburban back lot mainline replacement project.

Rebuild check and plug valves at Scott road station.

Electrical class at CPI / Troy Rimmey and Morgan Miller.

Flygt pump class / Bill Heckman.

# **Inspection:** Final As-Builts Approved: None

#### Mainline Construction

- a. North Atherton Place We are awaiting As-Builts.
- b. Stearns Crossing Ph. 8 We are awaiting As-Builts.
- c. Canterbury Crossing Lot 33 ph. 1B construction is 85% complete.
- d. Rockey Ridge Sections 3&4 Started Construction

#### New Connections:

b.	Multi-Family Residential	0	d.	Non-Residential	0
υ.	Withti-Talling Residential	U		TOTAL	-

PA One-Calls Responded to 4/1-30/16: 409

#### 6.6 Engineer's Report

The following comments are as presented to the Board in the written report prepared by the Consulting Engineer.

#### Retainer

• The annual inspection for discharges of stormwater as required by the NPDES Permit has been completed and the appropriate forms have been submitted to the Plant Superintendent.

#### **Odor Control Study Upgrades**

A comprehensive engineering services proposal including preliminary design, final design, bidding, construction administration, and on-call resident project representation, is being prepared. It is anticipated to be available during the week of May 30<sup>th</sup>.

# Standard Specifications and Details Update

• Final documents are being assembled for delivery to the Authority.

#### Act 57 Study

• The Act 57 Study was presented at the April meeting.

#### **Big Hollow Force Main Evaluation**

- An updated quote from LB Water is being obtained for ancillary components.
- After discussing several options with the Authority's staff, the recommendation is to install an 8-inch air release/vacuum valve at the highest point on the force main (estimated cost: \$8,500) and then sequentially proceed with upgrading to 8-inch valves at the other locations, based on pump response.

# Overlook Heights Sanitary Sewer Replacement: Suburban Avenue Backlot

- The Sewage Facilities Planning Module has been submitted to local agencies and has been advertised for public comment. The public comment period ends on May 31, 2016.
- The GP-5 (Utility Line Stream Crossings) Permit Application has been submitted to the Centre County Conservation District.

# Meeks Lane Pump Station and Force Main Design

- Prepared a conceptual site layout for review with the property owner.
- The basis of design report is being prepared.

# **Developer Plan Reviews:**

- No new developer plans have been submitted for review.
- There are no developer plans to be recommended at the meeting.

# **Wetland Flow Meter**

- Daily flow data has been collected from the meter's integral logger.
- HRG is working with LB Water and intern Sensus to determine the best and most reliable approach to providing a 12-24VDC power supply to the meter to enable the use of the external logger.

# 6.7 Construction Report

Mr. Wert had nothing additional to report/

#### 6.8 Executive Director's Report

The following comments are as presented to the Board in the written report prepared by the Cory Miller, Executive Director.

UAJA participated in a cooperative effort with College Township, the United States Fish and Wildlife Service and the Centre County Conservation District to do a significant tree and shrub planting project at the Gordon D. Kissinger Meadow. A total of 105 pots were planted including at least thirty-five 1.5 inch caliper trees. UAJA shared the cost of the plants with the Conservation District. Planting was done by personnel from all the partners.

Mr. Miller shared a letter he had received from Patton Township regarding tapping fees and nutrient credits with the Board.

### 7. Other Business

7.1 Executive Session

**Executive Session Approved** 

A motion was made by Mr. Ebaugh, seconded by Mr. Dempsey to adjourn to an executive session at 5:37 p.m. The motion passed unanimously.

# 8. Adjournment

The meeting was adjourned at 5:37 p.m.

Respectfully submitted,

UNIVERSITY AREA JOINT AUTHORITY

Secretary/Assistant Secretary