MINUTES UNIVERSITY AREA JOINT AUTHORITY 1576 SPRING VALLEY ROAD STATE COLLEGE, PA 16801

Regular Meeting – July 15, 2015

1. Call to Order

Mr. Schmalz, Chairman, called the scheduled meeting of the University Area Joint Authority to order at 4:13 p.m. Wednesday, July 15, 2015. The meeting was held in the Board Room in the office of the Authority with the following in attendance: Messrs. Dietz, Guss, Lapinski, McShea, Nucciarone, and Schmalz; Cory Miller, Executive Director, Dave Smith, Assistant Executive Director; Art Brant, Plant Superintendent; Dick Lahr, Collection System Superintendent; Jason Brown, Project Manager; Dick Campbell and David Gaines, Solicitor; Ben Burns, Tom Holleran and Dave Swisher, Consulting Engineers; Jason Wert, RETTEW; Mark Whitfield, State College Borough; Eric Vorwald, Center Region; and Robin Brant, Material Matters.

2. Reading of the Minutes

2.1 UAJA Regular Meeting – June 17, 2015

UAJA
Meeting Minutes
Approved

A motion was made by Mr. McShea, seconded by Mr. Guss, to approve the minutes of the UAJA meeting held on June 17, 2015 as submitted. The motion passed unanimously.

3. Public Comment

None.

4. Old Business

4.1 Odor Control Study Update

Mr. Burns, HRG, gave a brief report the board on the progress of the odor control study. Air Dispersion modeling has been completed. A meeting was held to explore ionization equipment as one possible alternative for odor control. An evaluation of all alternatives is now underway with 95% odor reduction from compost and dewatering facilities as the baseline.

4.2 Final Design:

Final design drawings for the Hunter's Chase Phase 6 sewer extension (Ferguson Township) have been received and reviewed by staff and our consulting engineer. The sewer extension will serve 13 EDU's of single family homes. The review comments have been addressed.

Final Design Approved A motion was made by Mr. McShea, seconded by Mr. Lapinski, to approve the Final Design drawings for Hunter's Chase Phase 6. The motion passed unanimously.

5. New Business

5.1 Change Orders

Change Order #2 in the additive amount of \$178,161.00 for Contract 14-08 for the material, labor and inspection to replace the Reverse Osmosis membranes.

Change Orders Approved A motion was made by Mr. McShea, seconded by Mr. Dietz, to approve Change Orders #2 Contract 14-08 for the material, labor and inspection to replace the Reverse Osmosis membranes. Motion passed unanimously.

5.2 Budget Amendment – Scott Road Force Main

As you are aware, we have had 5 different pipe failures in the force main just upstream of the Scott Road station. The cause of the failures is unknown, but it could be either bad pipe or surge pressure. In either case, HRG has recommended replacing 1000 feet of 6" PVC SDR 21 pipe with 8" PVC DR 14 (305 psi pressure rating) pipe. The estimated additional cost for materials to complete this work is \$57,035.00. The work will be completed by UAJA staff. This project was not budgeted. It will be assigned a project number and will be paid for with BRIF reserves.

Budget Amendment Approved

A motion was made by Mr. Dietz, seconded by Mr. Lapinski, to approve The Budget Amendment – Scott road Force Main. Motion passed unanimously.

5.2 Requisitions

BRIF #179	Dale Summit Acquisitions July Lease Pymt.	\$25,000.00
BRIF #180	Rettew SHAWT Eng, Inv #'s 89548 & 91684	\$8,700.00
BRIF #181	GCS Water Purification, LLC. Pay App #4 Membranes	\$178,161.00
BRIF #182	Metzler Forest Products, LLC 1655 cubic yards filter media	\$36,823.75

Requisition Approved

A motion was made by Mr. Dietz, seconded by Mr. Guss, to approve BRIF requisitions 179 - 182. The motion passed unanimously.

Revenue Fund # 139

Debt Service, Operation & Maintenance

\$1,000,000.00

Requisition Approved A motion was made by Mr. McShea, seconded by Mr. Lapinski, to approve Revenue Fund #139. 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 June 30, 2015.

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

	Jan. 2015	Feb. 2015	Mar. 2015	Apr. 2015	May 2015	Jun. 2015
Production	685 cu/yds.	546 cu/yds.	585 cu/yds.	942 cu/yds.	681 cu/yds.	882 cu/yds.
YTD. Production	685 cu/yds.	1,231 cu/yds.	1,816 cu/yds.	2,758 cu/yds.	3,439 cu/yds.	4,321 cu/yds.
Distribution	315 cu/yds.	902 cu/yds.	610 cu/yds.	1,146 cu/yds.	790 cu/yds.	744 cu/yds.
YTD. Distribution	315 cu/yds.	1,217 cu/yds.	1,827 cu/yds.	2,973 cu/yds.	3,763 cu/yds.	4,507 cu/yds.
Immediate Sale	1,664 cu/yds.	1,451 cu/yds.	1,396 cu/yds.	1,138 cu/yds.	1,290 cu/yds.	1,227 cu/yds.
Currently in Storage	2,349 cu/yds.	1,997 cu/yds.	1,981 cu/yds.	2,080 cu/yds.	1,971 cu/yds.	2,109 cu/yds.

SEPTAGE OPERATIONS

	<u>Jan. 2015</u>	Feb. 2015	Mar. 2015	Apr. 2015	May 2015	<u>Jun. 2015</u>
Res./Comm.	0	0	0	0	0	0
	gals.	gals.	gals.	gals.	gals.	gals.
Hawbaker	33,000	0	179,500	192,500	0	58,500
	gals.	gals.	gals.	gals.	gals.	gals.
CH/Potter	2,339.37	2,706.33	9,778.65	9,728.61	6,394.28	5,059.04
	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids
Port Matilda		683.88				
	1,517.88	lbs/solids	2,018.28	1,501.20	2,068.32	1,501.20
	lbs/solids		lbs/solids	lbs/solids	lbs/solids	lbs/solids
Huston Twp.	350.28	500.40	617.16	400.32	366.96	417.00
•	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids	lbs/solids
Total Flow	69,500	28,500	264,500	268,000	59,900	117,500
	gals.	gals.	gals.	gals.	gals.	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 no exceptions to our NPDES permit. The 12-month rolling average flow for June was 4.31mgd with the average for the month being 3.34mgd. The average monthly **influent** flow was 4.48mgd. There were no inspections by DEP 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:

	June-15	YTD	Plant Effl. Temp	Wetland Effl. Temp.
Best Western	58,000	233,000		
Centre Hills	6,673,000	16,620,000	June-15	June-15

Cintas	856,000	4,521,000	66.4
Red Line	158,000	2,049,000	
Uaja Wetland	0	19,745,000	
GDK Vault	8,364,000	57,389,000	
Kissingers	999,000	5,087,000	
Stewarts	3100	1,110	
TOTAL	19,857,800	105,645,110	

Plant Maintenance

- Replaced the coupling and aligned Utility Water Pump #1.
- Repacked RAS Pumps #3 and #4.
- Repaired controller for the security gate.
- Replaced the diaphragm in Primary Pumps #9 and #10.
- Skimmed fine coal from Tertiary Filters.
- Installed conduit, wiring, and alarm panels for additional controllers and monitors for the Ozone System. Currently waiting for instruments to arrive.
- Replaced lamps and intensity probe in U.V. Light #2. The removed probe will be sent back for re-calibration.
- Repaired 6" process line on #3MF.
- Replaced Blower #2 for WAS Tank #5. The old one will be sent back to the factory for warranty evaluation.
- Added nearly two feet of new media to the Bio-Filter.
- Repaired the level bay controls along with replacing a hydraulic lift cylinder for the head of #3 composter.
- Replaced the unloading chain on Knight Mixer #2.

6.5 Collection System Superintendent's Report

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

Mainline Maintenance:

- (UA) Lateral Installations (1) Lot 206 Cottonwood Ave.
- (UA) Lateral Repairs (0)
- (UA) Mainline Cleaning (0) manholes inspected- (0) feet cleaned
- (UA) Mainline Repairs (0)
- (UA) Manhole Repairs (0)
- (UA) Manhole Casting Repairs (0)
- (FTA) Lateral Installations (0)
- (FTA) Lateral Repairs (0)
- (FTA) Mainline Cleaning (0) manholes inspected- (0) feet cleaned)
- (FTA) Mainline Repairs (0)
- (FTA) Manhole Repairs (0)
- (FTA) Manhole Casting Repairs (0)

We are approximately 98% complete with the Selder's Circle project. Paving is yet to be placed. We installed some of the plantings that were required at the Allen Street back-lot project. We installed grid material on the Ghaner station's driveway and planted with grass (no more stone driveway). We also installed a new air release valve on the 20" force main at Big Hollow, per the Engineer's recommendation.

(A)CONSTRUCTION &(B)I/I INSPECTION: (A)(We TV'd <u>0 ua/0 fta</u> feet of mainline and inspected <u>0 ua/0 fta</u> MH's.) (B)Tested/Grouted – (MH's grouted ua <u>0 fta 0</u>/Joints tested ua <u>0 fta 0</u>/grouted ua <u>0 fta 0/</u>) (Grout used 0/Gal.). Estimated I/I-flow decreased (0gpd/= 0 EDU's).

Lift Station Maintenance:

Routine maintenance and general housekeeping was completed and all stations are reported to be operating normally. We ran pressure tests on the force main at Scott Road. We repaired two (2) E-one grinder pumps.

Inspection: Provisional As-builts Approved: Villa1 & Villa 2 Apts. Replacement

Mainline Construction:

- a. Highwoods at Toftrees Construction is approximately 90% complete.
- b. Village at PSU, Ph12 Construction is approximately 70% complete.

New Connections:

a.	Single-Family Residential	18	c.	Commercial		1
b.	Multi-Family Residential	3	d.	Industrial		0
	•				TOTAL	22

PA One-Calls Responded to 6/1-30/15: 353

6.6 Engineer's Report

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

Retainer

• HRG staff have attended local meetings (COG, SCWA, and others) where issues relating to the Authority are under consideration (flow based billing, sewer service boundary, etc.) to remain aware of the community representatives comments and positions in these matters.

Big Hollow Interceptor Rehabilitation

- Contracts 09-4, 09-5 and 09-6:Big Hollow Diversion Pump Station (General, Mechanical, Electrical)
- Contract 09-4 will be providing restoration touch-up around the pump station. Scheduling is dependent on weather.

Constructed Wetlands

- The Contractor re-tilled the wetland areas and applied additional wetland seed mix.
- The Contractor is finalizing punchlist items and submitting closeout documentation.

Selders Circle Sewer Relocation

• HRG is available to assist with construction as needed. When construction is completed, HRG will survey and produce Record Drawings for this installation.

Odor Control Study

- Air dispersion modeling has been completed and will be discussed.
- HRG met with an ionization equipment representative to facilitate alternative development.
- Alternatives evaluation is underway with a focus on 95% odor reduction from the

compost facility and the dewatering facility.

Standard Specifications and Details Update

• HRG is working to prepare updated specifications and details. The details have been prepared and delivered to UAJA for review. Flygt has prepared a control panel layout with component literature. This information was forwarded to UAJA's integrator for review.

Scott Road Forcemain Evaluation

- Pressure data obtained at one (1) second intervals did not provide further insight into pipe failures. HRG recommends replacing approximately 900 linear feet of 6" PVC SDR 21 with 8" PVC DR 14 (305 psi pressure rating). PVC is recommended instead of ductile iron to minimize surge potential, and the increased pipe diameter will also reduce velocities, and therefore surge potential. Unit price information for materials was obtained from L/B Water for use by the Staff.
- A technical memorandum is being prepared.

Marywood Pump Station: Pump Failure Evaluation

- Recent pressure data collected from the Marywood Pump Station suggest that the pumps are running too far to the right on the curves, potentially resulting in pump damage. A forthcoming report from Flygt will provide additional insight. An equivalent N series pump model and impeller combination has been selected through collaboration with staff and representatives of Flygt. The future Waddle Pump Station was considered when determining the suitability of an N series replacement.
- A technical memorandum outlining the basis of design for a future Waddle Pump Station is being developed.

6.7 Construction Report

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

General Services

General Services Items Completed for the Authority:

- Continued Coordination of Compost Modifications to Left/Right Servers from AEC Engineering (Portland, ME) and UAJA Staff
- Evaluation of Heat Recovery and Chilling with Reuse Water
- Evaluation of Natural Gas Cogeneration at the Main Plant
- Completed Act 129 Rebate Application for Ozone System Modifications
- Modified Blower Program to provide enhanced Energy Efficiency in off-peak flow hours

Solids Handling and Advanced Water Treatment System Upgrades - Contract 2014-05 through -08

Update of Construction Progress:

- Contract 2014-05 and Contract 2014-07 were Substantially Complete on May 22, 2015. A substantial completion inspection is scheduled for Contract 2014-06 for the week of June 15, 2015.
- Punchlists have been updated and a few issues are lingering for all three contracts. A meeting will be held Thursday July 16th to review and focus the contractor's efforts to complete the improvements.
- Closeout documentation has been received by Contract 2014-05.

Payment Applications and Change Orders:

Change Order #2 was prepared in the <u>additive</u> amount of \$178,161.00 for 2014-08 from GCS Water Purification, LLC for the replacement of the Reverse Osmosis Membranes and Labor for Inspection and Replacement. The Change Order was requested by UAJA and reviewed by RETTEW and <u>is recommended for Approval</u>.

 Payment Application #4 was received in the amount of \$178,161.00 for Contract 2014-08 from GCS Water Purification, LLC. This Payment Application was received and reviewed by

RETTEW and is recommended for Approval.

A summation of the payment amounts to date are as follows:

CONTRACT	Contract Amount	Change Orders Amount	Work Completed	% Complete	Payment Approved*	Retainage and Work to Complete
2014-05	\$954,700.00	(\$17,371.42)	\$910,328.58	97.1%	\$910,328.58	\$27,000.00
2014-06	\$198,500.00	-	\$187,000.00	94.2%	\$150,353.65	\$48,146.35
2014-07	\$121,700.00	\$18,238.40	\$111,851.34	79.4%	\$111,851.34	\$28,893.33
2014-08	\$158,995.00	\$182,529.00	\$325,624.50	95.3%	\$325,624.50	\$15,899.50

^{*}Inclusive of Recommended Payment for this Board Report

6.8 Executive Director's Report

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

Sewer Service to Penn State Water Treatment Plant

The COG Public Services and Environmental Committee considered the Penn State request for sewer service to the new drinking water plant at the July 7th meeting. The committee took action to authorize sewer service since it was a replacement of an existing service that will not result in an increase to the total number of EDUs.

The bigger picture of service to future PSU requests will be considered at a future meeting.

7. Other Business

7.1 PennDOT Agreement

UAJA is looking into a cost share agreement with PennDOT for the Branch Road bridge replacement project. At this time it is unclear what the terms of the cost share will be.

PennDOT Agreement Approved A motion was made by Mr. McShea, seconded by Mr. Lapinski, to authorize Mr. Miller to meeting with PennDOT to confirm the terms of the agreement and then execute the agreement once the terms are confirmed. The motion passed unanimously.

8. Adjournment

The meeting was adjourned at 5:25 p.m.

Respectfully submitted,

UNIVERSITY AREA JOINT AUTHORITY

Secretary Assistant Secretary