## July 2019 Monthly Report

## **BJCJSTP Rehabilitation and Restoration Project**

The following projects are either nearing completion, in construction, or in the planning stage.

Contract No.	Description	Consent Order Milestone	Status	
Contract No. 1	Compost Facility	Complete	Complete	
	Demolition		100	
Contract No. 2	FEMA Mechanical	Complete	Complete	
Contract No. 3	BAF Facility	Complete	Complete	
	Demolition		2098	
Contract No. 4	MCC HH	Complete	Complete	
	Emergency			
	Replacement			
Contract No. 5	BAF Restoration and	Projected Phase 1	Projected Phase 1	
	Rehabilitation Civil	Substantial Completion	Substantial Completion	
	Contract	August 31, 2019.	August 31, 2019.	
		Projected Phase 2	Projected Phase 2	
		Substantial Completion	Substantial Completion	
		January 2020.	January 2020.	
Contract No. 6	BAF Electrical	Projected Phase 1	Projected Phase 1	
		Substantial Completion	Substantial Completion	
		August 31, 2019.	August 31, 2019.	
		Projected Phase 2	Projected Phase 2	
		Substantial Completion	Substantial Completion	
		January 2020.	January 2020.	
Contract No. 7	BAF HVAC	Projected Phase 1	Projected Phase 1	
		Substantial Completion	Substantial Completion	
		August 31, 2019.	August 31, 2019.	
		Projected Phase 2	Projected Phase 2	
		Substantial Completion	Substantial Completion	
		January 2020.	January 2020.	
Contract No. 8	BAF Plumbing	Projected Phase 1	Projected Phase 1	
		Substantial Completion	Substantial Completion	
		August 31, 2019.	August 31, 2019.	
		Projected Phase 2	Projected Phase 2	
		Substantial Completion	Substantial Completion	
		January 2020.	January 2020.	
Contract No. 9	Secant Pile Contract	Complete	Complete	

Contract No. 10	Solids Handling	Substantial Completion	Substantial Completion	
	Renovation Civil #1 – June 30, 2020;		#1 – June 30, 2020;	
	Contract Substantial Completion		Substantial Completion	
		#2 – June 30, 2020;	#2 – June 30, 2020;	
	Substantial Completion		Substantial Completion	
		#3 – June 30, 2020; Final	#3 – June 30, 2020; Final	
		Completion - August 30,	Completion - August 30,	
		2020.	2020.	
Contract No. 11	Solids Handling	See Contract #10	See Contract #10	
	Electrical	Completion Dates	Completion Dates	
Contract No. 12	Solids Handling	See Contract #10	See Contract #10	
*	HVAC	Completion Dates	Completion Dates	
Contract No. 13	Solids Handling	See Contract #10	See Contract #10	
	Plumbing	Completion Dates	Completion Dates	
Floodwall	Floodwall and New		Currently in	
	Diversion Structure		Construction.	
			Completion Date March	
			1 2019.	

## **Contract Descriptions**

## Contract No. 1 - Compost Facility Demolition

Demolition of the upper portion of the compost facility was performed to accommodate the construction of the new Administration Building to house the plant staff as well as provide the new control room to operate the new facilities. Demolition of the lower portion of the Compost Building cleared the way for the construction of a new maintenance facility.

Contract Status: 100% Complete - Contract Closed

#### Contract No. 2 - FEMA Mechanical

The FEMA Mechanical Project replaces valves, equipment and other miscellaneous items damaged in the 2011 flood. It includes equipment in both the East and West Primary Sludge Pumping Stations, valves and equipment located in the Head House, and equipment associated with Sludge Thickener Pumping Station Nos. 1 and 2. The cost of the work associated with this contract is being reimbursed by FEMA due to the flood of 2011.

**Status:** Blue Heron has completed all of the work not deleted by change. The elutriate pumps were deleted from the scope of work and will be performed under Contract #5.

Contract Status: 100% Complete - Contract Closed

#### Contract No. 3 - BAF Facility Demolition

The BAF Demolition Contract removed the existing structures and utilities that conflict with the new construction work included in the BAF Rehabilitation and Restoration Project. Demolition efforts included selective demolition in the existing process tanks (C-Filters, N-Filters, and DN-Filters), buildings, mechanical equipment, and piping to ready the site for new construction.

Contract Status: 100% Complete - Contract Closed

#### Contract No. 4 - MCC - HH Emergency Replacement

Contract No. 4 replaced the original existing Motor Control Center (MCC) in the Head House (HH). The MCC is 50 years old and is identified as MCC-HH. The contract was bid as an emergency contract because the electrical system in the Head House was both critical to keeping the BJCJSTP in service, and because the original MCC was extremely unreliable due to the age and deteriorated condition of the gear. MCC HH Emergency replacement also replaced the existing raw sewage pump drives of the existing 50 year old equipment including new electrical feeders from the HH to the Johnson City Grit House No. 1, a new feeder from the HH to the Thickened Sludge Pump Station No. 1, and various other panel boards. The emergency work also included replacement of the existing raw sewage variable frequency drives that were located in the existing MCC HH. The new drives installed are more reliable, more efficient, and will provide better performance of the existing raw sewage pumps.

Status: All work on the MCC- HH project has been completed.

Contract Status: 100% Complete

#### Contract No. 5 - BAF Restoration and Rehabilitation Civil Contract

When combined with the other BAF contracts (Nos. 6, 7 & 8), Contract No. 5, the General Civil Contract, is intended to provide a functioning automated plant using a BIOSTYR system that can be modified to fit current plant configurations. It is also intended to provide functioning automated headworks and primary clarification processes upstream of the BIOSTYR system and solid handling processes downstream of the BIOSTYR system.

Major components of the work under Contract No. 5 include new coarse screens and ancillary equipment, new piping and valves for the influent pumps, new metering equipment, new fine screens and grit removal with ancillary equipment, a new primary distribution box, new mechanical equipment for primary clarifiers 1-10, new chemical equipment for primary treatment, new Chemical Storage Building, modification of the primary clarifier structural components to replace the aged and deteriorated mechanical equipment, new secondary influent pumps for the new BAF system, a new BAF backwash tank, new CN-BAF and DN-BAF facilities, a new methanol system that will feed the DN-BAF cells, new Ultra Violet Light disinfection system to replace the existing chlorine disinfection system, new sludge thickening equipment and systems, a new Administration Building, new odor control equipment, two new 2MW electric generators, and a new plant outfall to the river.

**Status**: In July, PC completed placing the remaining concrete for CN Cells 9-14, this leaves them with about 75 CY of structural concrete to place for the project. Their progress was controlled by reduced manpower by the concrete and rebar subcontractors. The bulk of the concrete placed this month was Phase 2 concrete. Matco has completed their work associated with the CN Cells 1-8 and is nearing completion on the electrical work for DN Cells. PC completed the work repair of M line in CN #2. All UV netting has been installed on the CN and DN Cells, with the exception of CN #2 and CN Cells 9-14.

PC completed the process work in the Headworks last month, and the Headworks is now on line. The fine screens and grit removal equipment is operational. PC completed their system demonstration test of the equipment in the Headworks in July. Backfill around the Headworks is nearing completion and the STP staff has access to all parts of the Headworks. Electrical and process systems installation have been completed in the BAF Treatment Facility. PC has finally completed and tested the Primary Influent Pipes to the PST's. The Primary Distribution Box is now officially in operation.

Testing of the control systems by Kruger for CN Cells 1-8 were completed by the end of July 2019. Kruger has proceeded with the testing of the control systems in DN this month.

Coatings for the existing channels at DN are nearing completion. Air piping to CN Cells 1-8 and DN Cells are operational. PC continues to work on the backwash drain pipe for CN 1-8 Cells and the DN Cells.

PC has installed the structural members for the grating in the DN Gallery and has also installed the instrumentation and control panels so that Matco can begin wiring the electrical components in the DN Gallery. They have provided temporary access platforms made of plywood. They will be installing the final grating and stairs in August.

CN Cells 9-14 concrete is complete. PC continued working on the backwash header in the CN Cells 9-14. PC's subcontractor missed their projected May completion date for concrete work for the CN Cells 9-14, but completed it by the end of July. Mechanical and electrical trades are sufficiently complete to allow Kruger to do their system checkout of all systems associated with CN Cells 1-8, DN Cells, the blowers for the CN and DN Cells, Methanol, and UV.

The mechanical trades completed installing the stainless steel pipe in the DN Building and DN Gallery. PC began installing the grating supports in the CN Influent Channel in July. Matco is nearing final completion on the electrical work for all process equipment in the DN and Methanol systems. Kruger is committed to completing the Functional Demonstration Test before the end of August for all equipment required to flow wastewater through the secondary treatment process before August 31, 2019. The current plan is to divert wastewater through the system the week of August 19<sup>th</sup>,

PC has completed work in the PSTs 7-10, and they are ready for service. PC continued installing yard piping for chemical feed to CN and DN this month.

Construction of the new Chemical Building is complete and ready for chemicals. GHD has completed the chemical system inspection so that the tanks can be registered for use with the DEC. Work in the East Odor Control Building is complete.

PC is nearing completion of erecting the metal SIPS Pump Building. All four pumps have been run and the Functional Demonstration Test is complete

PC final received the AIS compliant flanges necessary to complete the methanol pipe in the Methanol area. They have begun replacing the non-compliant flanges and will have the methanol system operational by the end of August.

Matco has completed the conduit work and has pulled the wire to various locations in the Generator Building. The new louvers for the Generator Building have been installed and Matco is connecting the electrical for the louvers in August.

PC has confirmed that they are not following the flawed CPM schedule, so we are having weekly schedule meetings with PC and all of the necessary multi-primes and subcontractors to advance the secondary treatment process and meet the DEC Phase 1 Milestone date of August 31, 2019. We have notified PC that they are not in compliance with the contract for providing a comprehensive schedule. We are currently holding two months payments as incentive to PC to comply with the CPM Schedule requirements for the contract.

PC completed installing the curbs, sidewalks, and paving for the new Administration Parking lot. There are issues with the elevation of the curb and paving. These deficiencies had been pointed out to PC and they will address them after August 31 milestone deadline.

PC has completed the south flood wall and completed the concrete placements at CN 9-14 to meet the Consent Order requirements for flood protection to elevation 845. In addition to the concrete work, Matco has completed the electrical power to storm water pump station 4. All storm water pump stations are also now operational from permanent power.

Contract Status: 89% Complete

#### Contract No. 6 - BAF Electrical

The BAF Electrical Contract supports the BAF General Civil Contract and includes all electrical and instrumentation associated with the BAF contracts. The components include installation of the new UV disinfection system, installation of the new generators, installation of the electrical

feed throughout the plant, as well as installation of the instrumentation and SCADA System throughout the plant.

**Status**: Contract No. 6 was bid and awarded in compliance with the May 27, 2016 milestone for issuing the NTP in the Consent Order.

This month the Contractor completed the work in the BAF Backwash Treatment Facility, DN Cells, UV, and Methanol Building. Matco has completed all distribution electrical work and is nearing completion of the fiber optic cable installation for SCADA Control and will continue working on the electrical work for CN Cells 9-14 this month. The two new 2MW generators are nearing completion. PC finally completed their work on the north wall of the Generator Building and Matco is connecting conduit and wire to the louvers to allow the generator testing to begin. All process power and control conduit and wire for the CN, DN, Blower Buildings, and UV have been installed and terminated by Matco. They continue to work on miscellaneous lighting and receptacles. Matco will complete the final electrical for the methanol system by the middle of August.

MATCO is providing input for the Project CPM baseline schedule.

Contract Status: 96%

## Contract No. 7 - BAF HVAC

The BAF HVAC contract supports the BAF General Civil Contract and includes installation of all HVAC Systems in all STP facilities as well as revisions to the odor control systems throughout the plant. The odor control improvements are intended to alleviate the odors that have been prevalent in the past in and around the plant.

**Status:** Contract No. 7 Notice to Proceed was issued on May 27, 2016 in compliance with the DEC milestones in the Consent Order. The contractor has been directed to have all HVAC and Odor Control Systems complete and functional by the middle of August. They continue to provide supporting information for the development of the CPM schedule, and have acknowledged they can meet the required milestones of the Consent Order. They are working on the HVAC systems for Headworks, Blower Building, CN Cells 1-8, DN Cells, and Thickener Pump Stations.

Contract Status: 97%

#### Contract No. 8 - BAF Plumbing

The BAF Plumbing Contract supports the BAF General Civil Contract and includes installing plumbing systems for the new and existing facilities included in Contract No. 5.

Status: Contract No. 8 Notice to Proceed was issued in compliance with the May 27, 2016 milestone for issuing the NTP in the Consent Order. The contractor has continued providing the

supporting information for the overall CPM schedule this month, and they have confirmed that they can meet the required milestones of the Consent Order.

This month they continued the installation of the plumbing in various locations at the site. All of their work critical to the August 31, 2019 milestone date has been completed.

Contract Status: 96% Complete

#### Contract No. 9 - Secant Pile Contract

The Secant Pile Contract includes installation of the secant piles that support the excavation for the new BAF backwash tank as well as supporting the new CN Cells 9-14. Construction also includes excavation to the final grade for the BAF backwash tank. This project was bid separately from Contracts 5-8. In doing so, a minimum of four months on the critical path schedule was saved.

**Status**: The installation of the secant pile wall is complete. Close out documents have been prepared and are being submitted to close out this project.

Contract Status: 100% Complete - Contract Closed

#### Contract No. 10 -Solids Handling Renovation Civil

Contract No. 10 is intended to renovate and improve the Solids Handlings Systems including the existing Digester Control Building, existing digesters, solids dewatering systems, and all ancillary equipment. As part of the improvement to the solids handling process, the following components will be constructed or installed. The new structures include a new Solids Handling Building, a new Gas Conditioning Building, and a new Sludge Loading Facility. The new equipment being installed includes new centrifuges, new mechanical thickeners, new gas processing equipment, new microturbines, and new scum screening equipment. The scope was further developed during the design processes to include sludge blend tanks. Additionally, the contract renovates the existing laboratory facilities at the STP. The contract was bid as a multi-prime contract consistent with New York State Construction Contract Requirements.

Status: Architectural work for the new Solids Handling Building is now complete. Concrete work for the Gas Conditioning Equipment Building was completed several months ago. Renovation for the first side of the lab at the Headhouse is complete, and we are awaiting a resolution on the occupancy of the newly renovated portion by the existing plant lab staff before we can begin work in the old lab. The Town of Vestal has refused to do a code inspection until all work in the building is complete. The attorney for the BJCJSTP Sewer Board sent a letter stating they would not allow STP staff to move into the newly renovated facility until they have a Certificate of Occupancy. This has caused a significant delay in getting the existing portion of the lab relocated so that the renovation can be done on the existing lab area. As soon as we can get the existing lab emptied, we can allow Quandel to begin work on the west half of the lab renovation. It should take Quandel

about a month to complete the lab renovation after they are able to move the WTP staff from the west half of the laboratory to the renovated east half.

Quandel has completed installing the mechanical systems in the Solids Handling Building. They were waiting on Matco to complete the electrical work so they could begin pre-functional testing and Functional Demonstration Testing of the equipment. Quandel scheduled the Functional Demonstration Testing for the centrifuges for September 23, 2019, despite our notice that Matco would be complete with the wiring by the end of July. Matco met the end of July projection. Jacobs was able to get the centrifuge manufacturer to commit to an August 5, 2019 date for start-up and testing of the centrifuges. After the manufacturer completes the Functional Demonstration Tests, they can begin the 7-day System Demonstration Test. Now that PC has completed the headworks, and grit removal has been achieved, we are able to deliver thickened sludge from the thickeners for processing by the centrifuges, and we will also be able to process digested sludge when it is available from the newly functioning Digester #3. After this diversion of the sludge, the existing centrifuges can be removed to make way for the new Mechanical Thickeners that are to be installed in the current centrifuge room.

Quandel was not making any progress on the removal and recertification of the gas conditioning equipment, so we were forced to remove the work from their scope of work and the City is procuring the equipment on a sole source contract. They are alleging that they are not responsible for reconditioning the equipment. Koester was awarded a purchase order to provide and install the equipment that would have been Quandel's obligation. Koester and JDV are nearing completion of the installation of the digester gas safety equipment and also digester mixing equipment. Digester #3 is fully operational, and Digesters #1 and #2 are complete and ready for service. We have been unable to start-up the remaining two digesters because we do not produce sufficient sludge to feed more than Digester #3.

Quandel declined to quote a cost proposal to recoat the inside of Digesters #1 & #2, which are the two smaller digesters. They also refused to repair the spalled concrete at the top of Digester #1 despite having a unit price for repairing spalled concrete in their base bid. The owner decided to coat the inside of Digesters #1 and #2 before installing the cover on these two digesters. We had to put digester covers #1 and #2 on hold pending completion of recoating the inside. We initially believed we would be able to get the covers installed in June, but the manufacturer was not available to return to the site to install the covers until July. The covers are now installed for Digesters #1 and #2.

We believe that Quandel has a contractual obligation to prepare a start-up plan for all three digesters. Because Quandel refused to prepare the plan, Jacobs prepared the plan for the Owner. Implementation of that plan could not begin until the Headworks is complete and functional. The start-up plan is complete, Headworks is operational, and star-up was underway before the June 30, 2019 milestone date. Quandel was eventually able to deliver 270,000 gallons of seed sludge, but

they did not meet their agreed upon July 8, 2019 date. Jacobs was able to arrange for delivery of seed sludge to prevent loss of the work that had already been done when Quandel defaulted on their agreement to start delivery on July 8. This saved at least three weeks to drain and refill the digester with primary effluent. We will be preparing the costs that we recommend be taken back from the contract with Quandel.

Quandel was able to do the System Demonstration Test in thickener #1 Pump Station during the filling of Digester #3. The segment of buried digester gas pipe that was leaking has been replaced. We developed and executed a plan that saved the City in excess of \$400K from the price quoted by the Contractors to clean the Digester Gas Pipe and Sludge Pipe in the Digester Control Building. The cleaning of the existing lines is now complete. Quandel began demolition work on thickener pump station #2 in July.

We developed and executed a plan that saved the City in excess of \$400K from the price quoted by the Contractors to clean the Digester Gas Pipe and Sludge Pipe in the Digester Control Building.

Contract Status: 93% Complete

#### Contract No. 11 - Solids Handling - Electrical

The Solids Handling Electrical Contract supports the Solids Handling General Civil Contract and includes installation of electrical for the new and existing facilities included in Contract No. 10.

**Status:** MATCO completed electrical work in both the Digester Control Building and has nearly completed the Solids Processing Building in July. Matco completed the control wiring and systems for the centrifuges in the new Solids Handling Building the last week in July. This work was inadvertently left out of the design for the building during the design phase. It is being done as a change order with the work authorized on a T&M basis.

**Contract Status: 90% Complete** 

#### Contract No. 12 - Solids Handling - HVAC

The Solids Handling HVAC Contract supports the Solids Handling General Civil Contract and includes installation of HVAC systems for the new and existing facilities included in Contract No. 10.

**Status:** J&K completed installing the boilers and heat exchangers for the digesters. They have completed start-up of the boilers and heat exchangers to support start-up of Digester #3. The boilers and heat exchangers brought the temperature of the Primary Effluent in Digester #3 up from 63 degrees to 98 degrees in less than a week. After the boilers were able to be run as intended in automatic mode, they were able to be operated as intended. It was originally reported that the boiler gas pipe was inadequate to operate the boilers, but the boilers operated as intended after the pressure setting on the gas pressure regulator was adjusted.

Quandel has submitted a claim for extended general conditions. We will evaluate the claim and review it with the Owners.

Contract Status: 90% Complete

## Contract No. 13 - Solids Handling - Plumbing

The Solids Handling Plumbing Contract supports the Solids Handling General Civil Contract and includes installation of plumbing systems for the new and existing facilities included in Contract No. 10.

**Status:** The plumbing contractor is JW Danforth and they are nearing substantial completion on the Solids Handling Building. Danforth continues to support the General Civil Contractor's schedule. Danforth finished supporting the cleaning of the Sludge and Digester Gas Piping in the Digester Control Building.

Contract Status: 89% Complete

#### **Floodwall**

The new floodwall being constructed at the STP is intended to protect the plant to an elevation 1.5 feet above the 2011 flood level. The floodwall includes concrete walls on the east and north sides of the STP. The project also includes two new pump stations to pump up stream out of the plant during the storm events. The new floodwall system works in conjunction with new floodwall features included in Contract No.5 BAF General Civil Construction. The floodwall systems are being funded by a FEMA recovery grant.

**Status**: The concrete floodwall under Streeter's contract has been completed. Startup and testing of the two storm water pump stations is complete. The access platform for the valves at the two storm drain pump stations need some minor modifications to eliminate a potential fall/trip hazard. This work is being executed as a change order, and will be reduced from the deductive change order that will close out the contract. Streeter tested the 54" gate in the sampling manhole in May. The gate failed the test and must have some remedial work done on the gate installation before it is retested. No significant work was performed this month.

Contract Status: 99% Complete

#### NOTES:

1. SWPPP measures continue to be maintained by all contracts. Any deficiencies noted during daily or weekly inspections are promptly remedied. The City received a Notice of Violation from DEC for SWPPP issues. We have addressed all of the issues, including the paperwork that was not modified as required for the inclusion of Solids Handling. We are attempting to get the SWPPP closed out for Streeter, and will need to transfer responsibility for the SWPPP outside the floodwall to the new WQIP contractor.

- 2. The WWTP Staff issued a PO to Drain Brain to clean the existing Digester Gas Pipe and Sludge Pipe. We are complete with this effort. The original quote from the Contractor was in excess of \$450K for just the cleaning of both sets of lines. The final cost was about \$53.6K, and was completed by December 15, 2018.
- 3. The City has issued a purchase order to JDV to provide the Digester Mixing Equipment for \$278,620. This equipment was in need of rehabilitation and replacement, but it was not included in any contract. The cost to rehabilitate equipment was less than the cost to replace the equipment. The quote of \$572,915 we received from Quandel was excessively high, and it was in the best interest of the City to purchase and rehabilitate the equipment separately. By performing this equipment purchase separately, we were also able to accelerate the delivery and installation of the equipment in advance of what Quandel was quoting. JDV is about 90% complete with the Digester mixing Equipment at the end of July.
- 4. The City has also entered an agreement with Koester to provide replacement equipment for the digester gas safety equipment and to include installation. The agreement was issued for \$639,086, and Quandel's quote was for \$1,110,668. We will be seeking some recovery from Quandel for some of the \$639K for the portion of the work that is included in their scope of work. Koester is 94% complete with the work at the end of July.
- 5. Weekly meetings are held for each contract to discuss the progress of the work and identify and resolve issues and problems. Meetings between contractors on the various contracts are held as necessary to facilitate any concerns and coordinate work between all contracts.

# Consent Order Compliance Table

DEC#	Description	Consent Order Date	Status
7	Flood Mitigation to Elevation 845	February 28, 2019	March 1, 2019
3f	Begin SIPS Commissioning	April 30, 2019	Completed before April 30,
3e	Backwash Waste Treatment Construction	June 30, 2019	Complete June 30, 2019. To be started with BAF Process by August 31, 2019.
3h	Hydraulic Testing of new BAF Backwash Tank	June 30, 2019	June 30, 2019
3j	Retrofit of two sludge thickeners. One is complete, the second should be complete by January 1, 2020. Two thickeners will be available for use at all times. Thickener #1 is complete and available for use. Thickener #2 is in service and will stay in service until thickener #3 rehabilitation is complete. Thickener #3 was finally released by Plant staff for rehabilitation on June 26, 2019. Thickener #3 rehabilitation will be complete by January 1, 2020 and Thickener #2 will be complete by March 31, 2020.	Requested variance June 30, 2019	March 31,2020
4d	Complete construction of anaerobic digesters. Digester #3 will be complete before June 30, 2019. Digesters #1 and #2 will be complete by August 31, 2019. Digester #1 and #2 cover installation was delayed to allow for coatings and crack repairs to be done in Digester #1 and #2. This was discussed with the DEC in 2018 and the DEC expressed their preference for doing to coatings now rather than in the future. Digester #3 will handle all sludge flow for the interim construction period.	Requested variance June 30, 2019	August 15, 2019
5b	Interim Operating Strategy for equipment from August 31, 2019 through January 1, 2020	July 31, 2019	July 31, 2019

3g	Complete construction and commence start-up of the plant Headworks, including the new bar screens and grit removal system, in accordance with the approved engineering	August 1, 2019	June 26, 2019
3i	Construction Complete on PST 7-10	August 31, 2019	June 30, 2019
3k	Complete Construction of CN 1-8 and DN.	August 31, 2019	August 31, 2019
31	Commence Operation of BAF Backwash Tank, BAF Backwash Treatment, Headworks, PST 7-10, CEPT, UV, Sludge Thickeners and appurtenances.	August 31, 2019	August 31, 2019
4e	Operation of Digesters #1 - #3. (Digester #3 is scheduled to be operational in June 2019.) All three digesters would be operable on or before the August 31, 2019 milestone date if the STP produced enough sludge to feed more than Digester 3. Sludge production after August 31, 2019 may be adequate to start-up a second digester, but likely will not see enough sludge to start-up the third digester until after Phase 2 at the earliest.	August 31, 2019	June 30, 2019/ August 31, 2019. Not possible to Achieve 3 <sup>rd</sup> digester Start-up. Insufficient Sludge being produced by the STP process for the near future.
3m	BAF CN Cells 9-14 Construction Complete	January 1, 2020	January 1, 2020. If we can finish sooner, we will push PC to do so.
3n	Operation in Compliance with SPDES	April 1, 2020	April 1, 2020

















