

Middlesex County Utilities Authority

Hurricane Sandy Update

March 14, 2013

FEMA, USACE, USEPA and NJDEP

Federal and State agencies have visited the site and are fully briefed on the restoration efforts being implemented by the MCUA. Both agencies are constantly monitoring the situation.

Service Interruptions

None reported

Central Wastewater Treatment Plant

The Central Treatment Plant is fully operational and is handling all wastewater and trucked waste entering the plant in Sayreville. Currently, the Central Treatment Plant is being powered by the Landfill Gas to Energy Facility and local electric utility. Analysis of December 2012 operating data shows Plant performance was impacted by the unscreened sewage conveyed through the Temporary Bypass Pumping System at the Sayreville Pumping Station. Excessive solids reduced the efficiency of the Final Settling Tanks for several days. January 2013 plant performance is compliant with permit discharge requirements.

The average rate of wastewater flow entering the Central Treatment Plant:
128 million gallons a day

South Amboy Pump Station

Operational

Repairs to damaged equipment are being performed by MCUA, which are ongoing.

The estimated average rate of wastewater flow conveyed to the Central Treatment Plant:
1-2 million gallons a day

Edison Pump Station

Operational

Five Main Pumps capable of conveying 85 MGD to the Central Treatment Plant are in operation. Main Pump No. 5 temporarily out of service for maintenance.

Calibration of pressure transducers and pressure transmitters are complete; final startup testing, commissioning and training for Main Control Panel initiated this week and continues to be in progress.

On-site emergency generators are functional in the event of loss of electric utility power; however, generator automatic control issues remain to be resolved.

Emergency work nearing completion; contractors in the process of demobilization.

Bypass pumping system capable of handling 20 -24 mgd is in standby mode.

Currently, the Main Pumps are able to convey 85 million gallons per day of wastewater to the Central Treatment Plant, which exceeds the average daily amount of wastewater that enters the station.

The estimated average rate of wastewater flow conveyed to the Central Treatment Plant:

20 million gallons a day

Sayreville Pump Station

Original Sayreville Pump Station

Main Pump Nos. 2E and 3E are operational [rated capacities of each pump 33MGD @ 102 feet Total Head], continuing the evaluation of pump hydraulic and mechanical performance; tests performed indicate Pumps 2E and 3E are capable of conveying approximately 80 MGD.

Continuing hydraulic evaluations of pump system conveyance capacity; draft report on the findings has been completed and is under review, further evaluations are ongoing.

Controls to permit manual back flushing of Main Pump Nos. 2E and 3E by MCUA Operators remain operable; back flushing of OSPS Main Pump Nos. 2E and 3E was not performed today.

Bar Screen No. 1 ready for operation upon introduction of flow through the OSPS influent channel. Completed alignment and grouting at lower level for Bar Screens No 2 and 3.

Sayreville Relief Pump Station

Main Pump Nos. 2R (placed in service today), 3R, and 4R are operational [rated capacity of 3R &4R: 50 MGD @ 89 feet Total Head; rated capacity of 2R: 40 MGD @ 89 feet Total Head]; recorded flow from Main Pump Nos. 3R and 4R has, at times, exceeded 60 MGD.

Controls to permit manual back flushing of Main Pump Nos. 2R, 3R and 4R by MCUA Operators are operable; back flushing SRPS pumps was not performed today.

Main Pump No. 4R normal operation remains a concern; pump discharge cone valve and motor bearing temperatures issues exist and amperage usage continues to be elevated. Adjustments to exciter circuit are scheduled for later this week to address the elevated amperage usage concern. Main Pump No. 4R can be operated if needed.

Trouble shooting the circuit breaker for the tie breaker between Bus "A" and Bus "B" of the 5kV switchgear is ongoing; an issue regarding the performance 4180V transformer on the Buss "B" of the 5kV switchgear was discovered today and troubleshooting is ongoing and received delivery of trailer mounted load cell for emergency generator testing which will be conducted tomorrow.

Pump Control Panel for Main Pump No 5R currently being assembled and is scheduled for delivery by the end of the week.

Completed removal of temporary wiring in 5kV switchgear for Main Pump No 2E and replaced with permanent wiring, removed isolation transformer for exciter in 5kV switchgear for Main Pump No 3R, resolved programming issues of VFD for Main Pump No 2R and pump is now operational, completed adding lugs for 5kV grounding shields at Main Pump No 5R and Main Pump No 6R VFD and motor, terminated shields at both ends, continued wiring modification in the 5kV switchgear for Main Pump No 6R, and completed termination of automatic transfer switch cables at the switch and Motor Control Center (A side).

Operating Bar Screen Nos. 1, 2 and 4 and Interconnection channel between SRPS Wet Well and OSPS Wet Well.

Temporary Bypass Pumping System

Operational

System operation has been on an intermittent basis due to Main Pump Nos. 2E, 3E, 3R and 4R capable of conveying all of the dry weather flow and a portion of the maximum wet weather flow to the Central Treatment Plant. Temporary Bypass Pumps were not operated for conveyance of sewage flow and will remain on stand-by.

Performed maintenance: recirculation system operational to prevent freezing.

Temporary Bypass Pumping System at the Weber Ave. Meter Chamber was not operated and will remain on standby. This System serves to isolate the MCUA Interceptor pipeline sewage flow from the local sanitary sewer collection system to mitigate potential impacts during wet weather events.

The estimated average rate of wastewater flow conveyed by the Main Pumps and/or Temporary Bypass Pumping System to the Central Treatment Plant:

104 million gallons a day

Temporary Wet Weather Overflow Facilities

WW-1 Facility at SPS site completed with floatables control system
WW-2 Facility at MCLF completed with floatables control system
WW-3 Facility at MCLF completed with floatables control system

WW-4 Facility at MCLF:

- Pump WW 4-1 completed with floatables control system
- Pump WW 4-2 completed with floatables control system
- Pump WW 4-3 completed with floatables control system

All six Wet Weather Overflow Pumps are fully operational and currently on stand-by; freeze protection is in place.

Industrial Users

Industrial users are being notified that Sayreville Pump Station and Edison Pump Station currently can convey average daily flows to the Central Treatment Plant and may resume discharging to their respective wastewater collection systems. Also, MCUA maintained the reduced trucked in waste rate until January 4, 2013. As of January 5, 2013 the Septage Rate is \$48.00/1000 gallons and the Industrial Rate is \$72.00/1000 gallons.

Uncontrolled Overflows

None as of January 26, 2013

Controlled Overflows

None as of January 17, 2013

Middlesex County Landfill Hours

Middlesex County Landfill is fully operational and open to accept solid waste for disposal. Below is the operating schedule for the Landfill in East Brunswick until further notice.

Monday thru Friday	7:00am – 3:00pm
Saturday	7:00am - 12:00 noon
Sunday	Closed

Contact Information: Tony Cicatiello, 908.568.3280