

# ***Middlesex County Utilities Authority***

## ***Hurricane Sandy Update***

***March 11, 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:  
98 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 scheduled to be completed the week of March 11, 2013.

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:

18 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.

#### **Sayreville Relief Pump Station**

Main Pump Nos. 3R and 4R are operational [rated capacity of 50 MGD @ 89 feet Total Head]; recorded flow from each Pump has, at times, exceeded 60 MGD.

Controls to permit manual back flushing of Main Pump Nos. 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 the outdoor switchyard transformer to address the amperage usage were completed today. Shortly thereafter issues concerning the 5kV switchgear and Oil Circuit Breaker (OCB "B") occurred which have been resolved and the 5kV switchgear has been reactivated; however, trouble shooting of the tie breaker between Bus "A" and Bus "B" of the 5kV switchgear is ongoing. Pump has not been reactivated.

Installed grout forms for Main Pump No 5R and 6R, grouted Main Pump No 5R in place, completed termination of armored 5kV cable at Main Pump 5R VFD and motor, completed installation of armored cable from VFD to motor and initiated terminations for Main Pump 6R, successfully completed checking I/O connections for pump control panel, VFD and motor control sensors ( RTD's and vibration sensors) for Main Pump No 2R, successfully completed testing of 120 V auxiliary power for VFD cabinet heater and motor heater for Main Pump No 2R, continued wiring components (RTD's, cabinet/motor heater, vibration sensors, etc.) for Main Pump No 1R and 6R VFD, completed termination of winding RTD cables at Main Pump No 5R motor and continued termination of winding RTD cables at Main Pump No 6R motor.

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:

76 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