

# Middlesex County Utilities Authority

## Hurricane Sandy Update

December 27, 2012

### Meetings

None scheduled

### FEMA, USACE, USEPA and NJDEP

Federal and State agencies have visited the site and are fully briefed on the bypass operations of the MCUA. Both agencies are constantly monitoring the situation and have been providing whatever resources the MCUA needs.

### Service Interruptions

One residential backup, not confirmed to be related to the MCUA

### 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.

The average rate of wastewater flow entering the Central Treatment Plant:  
154 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

Four Main Pumps capable of conveying 85 MGD to the Central Treatment Plant are in operation.

Repairs to electrical, mechanical and control equipment in the pump station will continue and on-site emergency generators are functioning, however, control issues remain to be resolved

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:

55 million gallons a day

### **Sayreville Pump Station**

#### **Original Sayreville Pump Station**

Operating Main Pumps 2E and 3E [rated capacity of each pump 40MGD], currently evaluating pump hydraulic and mechanical performance; tests performed indicate both pumps conveying approximately 45 MGD

Completed intermediate bearing cross bracing for Main Pump 1E and initiated work on Main Pump 4E

Completed electrical demolition of the Motor Control Center

Continuing hydraulic evaluations of pump system conveyance capacity; report on the findings is scheduled to be completed by the end of the week. Temporary flow monitoring equipment installation is scheduled to be completed tomorrow.

Continuing work for installation of bar screens

### **Sayreville Relief Pump Station**

Operating Bar Screen 1 and Interconnection channel between SRPS Wet Well and OSPS Wet Well

Completed removal of all six pump motors, the two constant speed pump motors have previously been shipped for refurbishment, and today two of the remaining four were shipped.

Completed the removal of all pump drive shafts

Initiated testing of 5kV switch gear motor overload relays for Main Pumps 2R and 3R.

Completed testing of 5kV switchgear overcurrent relays to allow activation of a second electric utility feeder; planning on going to activate the second feeder

Continued testing and coordination of the 480V MCC circuits and wiring

Continued work on the electrical connections for the new actuators to operate sluice gates in the screen room

Continued selective removal of electrical equipment, wiring and conduit

Continued coordination of surge control panel planning and fabrication

### **Temporary Bypass Pumping System**

Operational

Performed Pump maintenance: back flush pumps, rotated road plates and conducted preventive maintenance

Continuing hydraulic evaluations of pump system performance and compiling data from tests performed and preparing report

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

97 million gallons a day

### **Temporary Wet Weather Overflow Facilities**

WW-1 Facility at Sayreville Pump Station Site functional with interim floatable control

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

### **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 will maintain the reduced trucked in waste rate until January 1, 2013 to accommodate entities which elect to have their wastewater processed at its Central Treatment Plant.

### **Uncontrolled Overflows**

A wet weather event commenced on December 26 and continued into December 27 which elevated the rate of sewage flow entering the Sayreville Pump Station facilities beyond the available capacity of the two operational Main Pumps and Temporary bypass pumping systems. Controlled overflows commenced on December 27, 2012 at approximately 12:02 am at the Sayreville Pumping Station and Middlesex County Landfill, when the flow rate to the Central Treatment Plant (CTP) was 98.8 MGD. Wet Weather Overflow Facilities are being constructed as a precautionary measure to protect the Sayreville Pump Station from sewage flooding while repairs continue to restore equipment severely damaged by Hurricane Sandy and to mitigate Uncontrolled Overflows. The Facilities constructed to date have an estimated pumping capacity of 78 MGD not including the slide gate at the OSPS Influent Channel. These Facilities began operating at approximately 12:02 am, and together with the flow to the CTP, amount to an approximate sewage flow rate of 178 MGD. Despite this amount of pumping capacity from the Sewer System, the Infiltration and Inflow from the rain event entering our Participants Sanitary Sewer Systems was in excess of available pumping capacity which resulted in Uncontrolled Overflows. These overflows occurred at Donaldson Park in Highland Park at approximately 8:25am and continued to 12:15pm and at Johnson Park in Edison Twp. / Piscataway Twp. at approximately 8:00am and continued to 1:37pm at which time all Uncontrolled Overflows ceased.

### **Controlled Overflows**

At 12:15 am on December 9, 2012, Main Pump 3E and at 2:45pm on December 21, 2012 main Pump 2E both in the Original Sayreville Pump Station were placed into operation. With these pumps in operation in concert with the four Temporary bypass pumping systems, it is anticipated intermittent controlled overflows will no longer occur when normal average daily flows enter the Sayreville Pump Station

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**Middlesex County Landfill Extending Hours**

Middlesex County Landfill is fully operational and open to accept solid waste for disposal. The Landfill will continue to extend operating hours during the week. Below is the schedule for the Landfill in East Brunswick.

Wednesday-December 26 through Saturday December 29	7:00am-4:30pm
Sunday-December 30	Closed
Monday- December 31, New Year's Eve	7:00am-3:00pm
Tuesday- January 1, 2013 New Year's Day	Closed
Wednesday- January 2 through Friday- January 4	7:00am-4:30 pm
Saturday- January 5	7:00am- 2:00pm
Sunday- January 6	Closed

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