Burlington WW

City of Burlington

September 1, 2010

Russ Royce
Iowa Department of Natural Resources Field Office #6
Environmental Protection Division
1023 W. Madison
Washington, IA 52353-1623

Re: Wet Weather Bypass at Burlington Wastewater Treatment Plant
Wet Weather SSO from (newly) Separated Hawkeye Sewer System
NPDES Permit No. 2909001

This e-mail and the information herein is provided in addition to the phone call made today, 9/1, to Field Office #6 to report an outflow event within 12 hours of becoming aware of the event.

Burlington experienced a significant rainfall event over a relatively short period of time early today. Total precipitation for the 24-hr period from 6 a.m. yesterday to 6 a.m. today was measured at the wastewater plant at 1.7" inches.

Because of the heavy rain, bypassing occurred at the Wastewater Plant. The influent flow rate entering the WWTP can be controlled by the plant's automated influent valve; hydraulic design through the plant is 12,500 gpm. The valve control set point was set at 13,200 gpm. Maximum influent flow rate was 13,800 gpm. Bypassing upstream of the influent valve occurred from 2:20 a.m. to 2:40 a.m. and went to the Mississippi River at Outfall No. 022. TOTAL metered bypass of untreated combined flow was 8,000 gallons.

The downstream water plants (Ft. Madison and Keokuk) were notified of this bypass event by way of telephone at 4:00 a.m.

Also as a result of the same significant rainfall event, both Gunnison Equalization Tank and Lucas Equalization Tank took on wastewater during the elevated flow period; only the Lucas tank appears to have completely filled during the rain event and overflowed to the storm sewer system. There is no flow meter on the overflow from the Lucas Tank. Public Works/Engineering was provided information for the Lucas Tank available on the wastewater plant's SCADA system (TRENDS graph of Equalization Tank levels with time reference) for review and calculations. They have yet to review the data. An estimate of the volume of untreated wastewater outflowed to the storm sewer from the Lucas Tank will be provided once they have performed their review and calculations. The bypassed sanitary flow combined with any storm water carried by the storm sewer would enter the Mississippi River at Outfall No. 011.

I have provided updated information to the downstream water plants, Ft. Madison and Keokuk, today via this email. If you have need for any further information, please call me at (319) 753-8157.

Donald C. Fitting
WWTF Superintendent

Cc: Doug Worden, City Manager
Steve Hartman, City Engineer
Paul Brandt, DNR FO #6