# MUD CREEK WPCP STANDARD OPERATING PROCEDURES

### WET WEATHER/EMERGENCY OPERATING PLAN

The goal of this Wet Weather Operating Plan is to establish operating procedures for the Mud Creek WPCP to:

- Maximize treatment of wet weather flows thereby minimize pollution of the receiving waters;
- Prevent sewer overflows and spills;
- Maintain the stability and efficiency of the facility;
- Facilitate recovery of normal operation and performance following a wet weather event.

Mud Creek WPCP was expanded from 3.22 MGD ADF to 5.7 MGD ADF with a 17.0 MGD peak flow capacity. The normal dry weather flow is 2.8 MGD ADF. During heavy rain events, the treatment plant experiences high flows because of inflow and infiltration (I&I) of groundwater into collection system.

When the treatment plant experiences high flows due to a heavy rain event, plant personnel must follow the following procedures to meet the goals listed above.

## **Monitoring Weather:**

The Utilities Director receives e-mail notifications of possible severe weather conditions in the area from Lowndes County Emergency Management, which is forwarded to the Plant Superintendent. Also, operations staff monitor weather conditions via computer and cell phone.

## **Before Wet Weather Event:**

Constantly monitor weather.

Verify all equipment is in working order.

Ensure all chemical storage tanks are stocked. (Alum and hypochlorite)

Ensure pumping station is at low level.

Ensure pumping station is clean of floating materials.

Ensure standby personnel and extra personnel are ready to be called if needed.

If weather event is forecasted during 2<sup>nd</sup> and/or 3<sup>rd</sup> shifts, additional personnel will be assigned to shift(s) to assist in operations during event.

### **During Wet Weather Event:**

PLANT SUPTINTENDENT and/or ASSISTANT SUPERINTENDENT ARE TO BE NOTIFIED, IF NOT ONSITE, THAT WET WEATHER PROCEDURE IS BEING IMPLEMENTED.

### WET WEATHER PROCEDURES:

During normal operation, plant wet well is monitored via SCADA (Supervisory Control and Data Acquisition) at the OWS (Operator Workstation); operators use the flow set-point/level trim adjustment to manipulate the pumps keeping wet well level within operating zone (10.5ft. -12.5 ft.). During/after heavy rainfall, flow to plant increases and wet well level starts rising. Operators adjust the flow set-point as needed to keep wet well level in operating zone. The flow set-point/level trim adjustments operate in auto up to 7.0 MGD. Once 6.99 flow is reached, flow set-point/level trim adjustments cannot be made; pump(s) are taken out of auto mode and placed in manual mode. Using manual mode, operators adjust speed of pump(s) at OWS to keep wet well level below 15 feet. This procedure must be followed closely as the operator manually controls flow to the head works.

The following can be done prior to forecasted weather event (severe thunderstorms, heavy rain) or when flow to headwork reaches >6.0 MGD.