

March 13, 2018

Mr. Gavin Gray
Enforcement Analyst
Office of Water Quality, Enforcement Branch
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

FY152150

RE: Revised Interim Operating Plan
NPDES Permit Number AR0022292, AFIN 04-00052
City of Decatur, CAO LIS 16-094

Dear Mr. Gray:

As requested in your letter dated February 22, 2018, this letter serves as the revised interim operating plan for the Decatur Wastewater Treatment Plant (WWTP). The City of Decatur (City) has retained McClelland Consulting Engineers (MCE) to reevaluate its sludge handling and disposal procedures and prepare this revised interim operating plan. Following is a discussion on the operational measures that will be undertaken at the WWTP to maximize the removal efficiency of all pollutants covered by the permit. The attached **Figure 1** is an overall map of the WWTP with the revised interim operating measures identified.

Flow Diversion

As mentioned in the interim operating plan dated March 9, 2017, the City continues to divert flows that exceed the treatment capacity of the WWTP to the equalization pond for temporary storage. This measure will be continued until the proposed process improvements are constructed, at which time the capacity of the WWTP will be increased to 3.8 MGD. The improvements are scheduled to be constructed and operational by December 2018.

In addition, during the recent heavy rains that occurred in late February 2018, the City identified an area of significant infiltration/inflow (I&I) in their system near the TNT Express Convenience Store on Hwy 59. The City has received Council approval to hire a contractor to install lining on approximately 1,000 LF of existing sewer to reduce I&I in this area, which will subsequently reduce the volume of flow diversion required during rainfall events. This measure is scheduled to be complete within 60 days.

UV Disinfection System

As mentioned in the interim operating plan dated March 9, 2017, the City has performed routine maintenance on the UV disinfection system to maximize its rated capacity of 3.0 MGD. The City will be replacing lamps and sleeves on the system again by March 19, 2018. This measure will continue until the new UV system can be installed and placed into operation, which is currently scheduled to occur in August 2018. The new UV system will have a rated capacity of 4.6 MGD.

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Sludge Handling and Disposal Procedures

The City has identified several measures to improve the efficiency of sludge handling and disposal at the WWTP, which will in turn reduce the potential for solids discharging from the WWTP into the receiving stream. These measures are described in more detail below:

- Belt Filter Press
 - The City had rented a belt filter press in 2017 to increase the sludge processing capabilities at the WWTP. In November 2017, the belt filter press was taken out of service and returned due to freezing temperatures.
 - The City subsequently placed the existing fan press back into operating and increased the processing time from 8 hours/day to 14 hours/day. In addition, the fan press was serviced in February 2018, which increased the solids handling capacity from 50 gpm to 65 gpm.
 - The City has procured another 2.2-meter belt filter press, which will be placed into operation by March 30, 2018. The solids handling capacity of this press will be approximately 100 gpm, or approximately a 50% increase in capacity over the existing fan press. The fan press will subsequently be taken out of operation and prepared for removal from the existing sludge building in order to make room for the new sludge screw press that will be installed as part of the WWTP process improvements. Currently the new sludge screw press is scheduled to be in operation by late October 2018.
- Actiflo System
 - The City hired an additional employee at the WWTP in February 2018. This employee works the day shift (8 AM to 4 PM) and now spends approximately 95% of his time operating and maintaining the Actiflo system to maximize its treatment efficiency and reduce the potential for solids burping out of the system. The City has seen a marked improvement in the operation of this system since this employee was hired.
 - The City is converting the polymer feed from a dry feed system to a liquid feed system. This will allow the Actiflo system to better adapt to changes in flows/loadings and operate more efficiently. The liquid feed system will be on line by March 23, 2018.
 - The City is now running 2 pumps from the Actiflo system, which has increased the City's ability to push flow through this system and not cause a bottleneck, which will also reduce the potential for solids burping out of this system.
 - In addition, the City has received Council approval to hire an additional employee to work the night shift (8 PM to 4 AM) at the Actiflo system, if it is found that additional operation and maintenance is necessary to handle the increase in flows that occur in the morning hours when the Simmons Flood Plant begins its operations for the day.
- Wasting Procedures
 - The City is currently wasting to the aerated sludge storage tank (ASST) at all times while the jet motive pumps are in operating in the SBR tanks. This is being done to maximize removal of sludge from the SBR tanks.

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- The City has also installed a temporary line on the existing line from the ASST to the sludge press building. This temporary line discharges into the existing pond adjacent to the main WWTP, and has an estimated available capacity of 1.7 MG. This gives the City the ability to waste directly from the SBR tanks to the pond, in the event that the ASST reaches its capacity and cannot handle additional sludge. The sludge can be stored in the pond until it can be dewatered and processed for disposal.

Plan Implementation

As previously discussed, several of the revised interim operating measures have already been implemented, with the remaining items to be implemented no later than March 30, 2018. The City understands the importance of maximizing the removal efficiency of pollutants entering the receiving stream, and is committed to continuing these measures while the proposed process improvements are being constructed and placed into operation.

Please don't hesitate to let me know if you have any questions or need additional information.

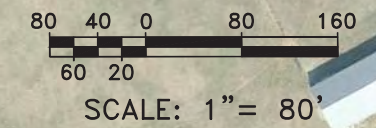
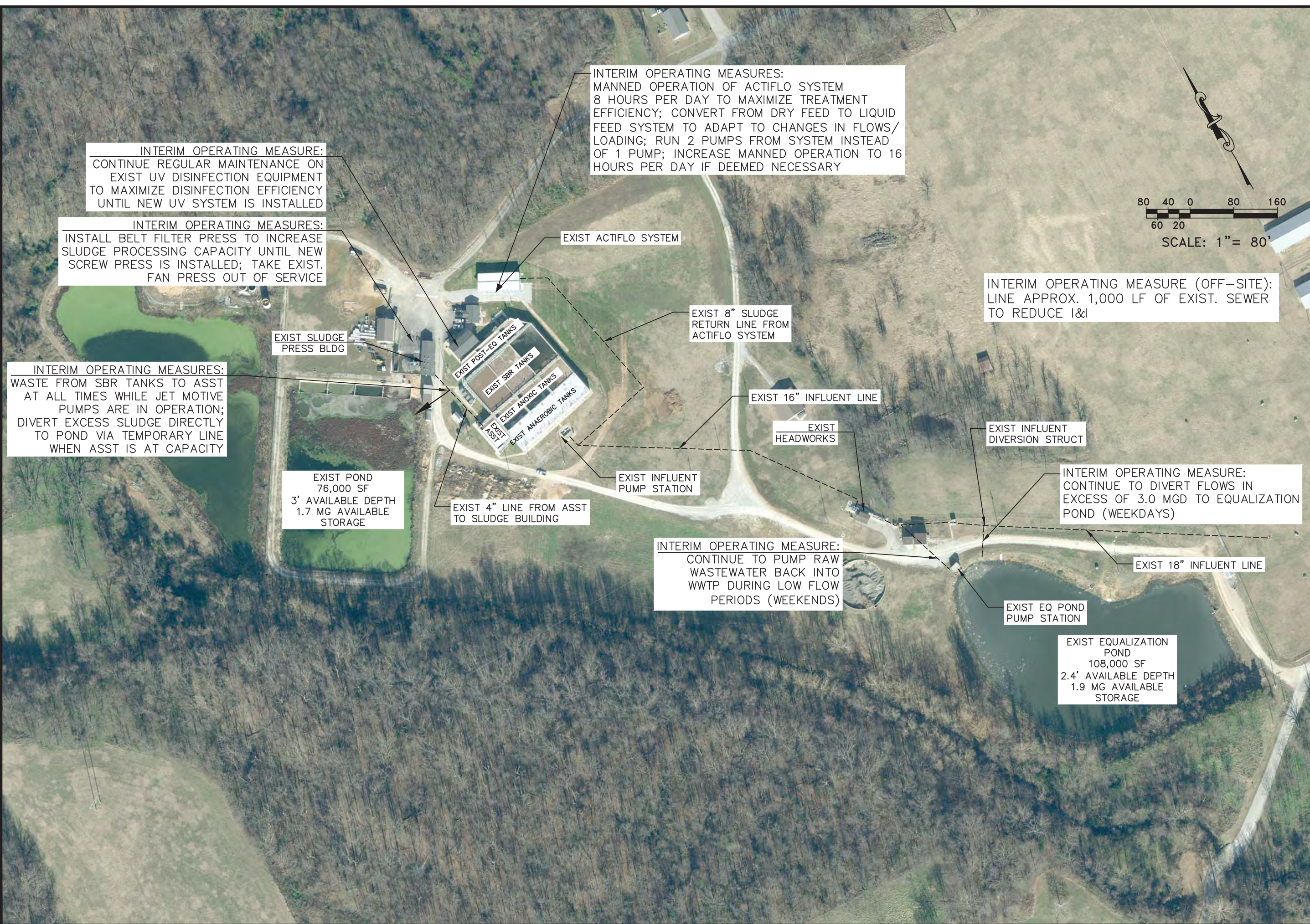
Very Truly Yours,



Nicholas R. Batker, PE, CFM

Cc: Mayor Robert Tharp
Mr. James Boston, Director of Public Works
Ryan Adler – Crossland Heavy Construction

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ORIGINAL SIGNATURE ON FILE

DECATUR WWTP
DECATUR, ARKANSAS



NO.	DATE	DESCRIPTION

REVISED INTERIM OPERATING PLAN

PROJECT ENGR: NRB DRAWN BY: LEW
DATE: MARCH 2018
SCALE: 1"=80' JOB NUMBER: FY152150

FIG. 1