



March 14, 2025

Ms. Jessica Murphy
Manager, DWR Compliance and Enforcement Unit
Tennessee Department of Environment and Conservation
Davy Crockett Tower
500 James Robertson Pkwy, 9th Floor
Nashville, TN 37243

RE: Mount Pleasant March 2025 CAP/ER Status
Consent Order and Assessment, WPC 17-0004
City of Mount Pleasant

Dear Ms. Murphy:

In accordance with the requirements of the July 24, 2018, TDEC Consent Order and Assessment, WPC 17-0004, and the recently approved deadline extension request, a summary of the status of the corrective action plan / engineering report (CAP/ER) items is provided below.

As stated in previous consent order annual reports submitted to TDEC, the single remaining CAP/ER item that remains for the City of Mount Pleasant to complete are the improvements at the wastewater treatment plant (WWTP). The WWTP construction project scope consists of rehabilitating a majority of the processes at the facility. A summary of the scope, broken down by facility area, is included in the attached table. The table also details the work that has been completed and the work remaining within that area.

Over the next month from the date of this letter, the following construction progress is expected to be made:

- Continued preparation for startup of the MBR (membrane bioreactor) system, including refinement of the control system
- Initial treatment of water via the new MBR system
- Installation of final, new pump at influent pump station
- Continued progress on punch list items.

Photos of construction completed progress are included with this letter.

The current construction schedule shows approximately 2 months of duration following the initiation of the new MBR system.

If there are any questions regarding the attachments to this letter or if any additional information is needed, please contact me at 615-252-4236 or matthew.johnson@bargedesign.com.

Ms. Jessica Murphy
March 14, 2025
Page - 2



Sincerely,

Barge Design Solutions, Inc.

Matthew Johnson, PE
Project Manager

c: Mr. Kareem Moxey, TDEC
Mr. Phillip Grooms, City of Mount Pleasant
Mr. Ted Howell, City of Mount Pleasant
Mr. Dale Brown, City of Mount Pleasant
Mr. Luke Burris, PE, Barge Design Solutions

Enclosures

Barge project # 34808-00

Plant Area	Scope	Work Completed	Work Remaining
Site	Repair disturbed areas, demolish of four older structures, install new sidewalks, asphalt paving of the plant driveway.	<ul style="list-style-type: none"> Disturbed areas have been repaired. Demolition of one structure. 	<ul style="list-style-type: none"> Demolition of three structures. New sidewalks. Paving the driveway. Punch list items.
Influent Station	Replace four pumps, select piping, and all associated instrumentation, controls, and electrical equipment.	<ul style="list-style-type: none"> Three new pumps are installed. Piping associated with pumps. New electrical gear, control panels, instrumentation are installed. 	<ul style="list-style-type: none"> Installation of one new pump. New piping for return from lagoon system, including flow meter. Painting new piping. Adjustment to controls for proper operation. Punch list items.
Headworks	Install new access platform, add overflow piping to screens, install concrete pad and trench drain for dumpster.	<ul style="list-style-type: none"> All items completed. 	<ul style="list-style-type: none"> Punch list items.
Treatment Basin 1	Install mixer, baffle wall, diffusers, sluice gate, effluent weir, dissolved oxygen (DO) probes, slide gate, splitter box	<ul style="list-style-type: none"> All items completed. 	<ul style="list-style-type: none"> Punch list items.
Treatment Basin 2	Install mixer, baffle wall, diffusers, sluice gate, effluent weir, DO probes, PH probes, and slide gate.	<ul style="list-style-type: none"> All items completed. 	<ul style="list-style-type: none"> Punch list items.
Intermediate Mixed Liquor Recycle Pump Station	Replace existing pumps with new pumps, select piping, and all instrumentation, controls, and electrical equipment. Expand concrete area for valves and access.	<ul style="list-style-type: none"> All items completed. 	<ul style="list-style-type: none"> Punch list items.
Membrane Bioreactor and Equipment Building	Construct new building (shared with administration and lab) with tanks for MBR and rooms for equipment and chemicals. Systems include permeate pumps, return activated sludge (RAS) pumps, membrane blowers, backpulse tank, compressed air, sodium hypochlorite and citric acid feeds, and instrumentation and controls.	<ul style="list-style-type: none"> All equipment, piping, instrumentation is installed and tested. 	<ul style="list-style-type: none"> MBR system is nearly ready for commissioning. Additional controls/programming items to be finalized. Punch list items.

Administration and Lab Building

Construct new building (shared with MBR equipment) with lab, office, breakroom, bathroom, electrical room, and control room

- Punch list items.

Blower Building

Demolish existing blowers and generator. Install two process blowers, and two digester blowers. Replace main plant electrical feed and motor control centers (MCCs). Miscellaneous building improvements.

- All items completed.
- Punch list items.

Digester

Install new 4-inch diameter ductile iron air piping, diffusers, sluice gate, check valve, and decant piping.

- Air piping installed.
- Check Valve installed.
- Correct sluice gate installation.
- Decant piping.
- Punch list items.
- Punch list items.

Lagoon Site

Install motor operated valve, piping to return flow to WWTP, SCADA panel.

- All items completed.
- Punch list items.

Construction Progress Photos



1. New influent pumps and piping



2. Headworks access structure



3. Treatment basin 1 with baffle wall, new air piping and control valve, and instrumentation.



4. Treatment basin 2



5. New membrane cassettes being installed.



6. Membrane permeate pump



7. RAS pumps and piping



8. Membrane backpulse tank and blowers



9. Membrane chemical feed



10. Membrane electrical gear



11. Process blowers and electrical gear



12. Overall site view



13. New lab



14. New breakroom