



April 14, 2025

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

RE: Mount Pleasant April 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 CAP/ER item that remains for the City of Mount Pleasant to complete is 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.

During the last month, it was determined that additional construction was necessary to screen the mixed liquor prior to starting the membrane bioreactor (MBR) system. This work has started and is currently in progress. The contractor continued to make progress during this past month on other scope items. Over the next month from the date of this letter, the following construction progress is anticipated to be made:

- Continued preparation for startup of the MBR system, including refinement of the control system and screening of the mixed liquor
- Initial treatment of water via the new MBR system
- Continuing to install the 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](mailto:matthew.johnson@bargedesign.com).

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Sincerely,

**Barge Design Solutions, Inc.**

A handwritten signature in dark ink, appearing to read "Matthew Johnson", is written over a light gray rectangular background.

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
<b>Site</b>	Repair disturbed areas, demolish of four older structures, install new sidewalks, asphalt paving of the plant driveway.	<ul style="list-style-type: none"> <li>Disturbed areas have been repaired.</li> <li>Demolition of one structure.</li> <li><b>Final electrical and communication pull boxes and conduit.</b></li> <li><b>Completed 1 punch list item.</b></li> </ul>	<ul style="list-style-type: none"> <li>Demolition of three structures.</li> <li>New sidewalks.</li> <li>Paving the driveway.</li> <li>Punch list items.</li> </ul>
<b>Influent Station</b>	<b>Pump</b> Replace four pumps, select piping, and all associated instrumentation, controls, and electrical equipment.	<ul style="list-style-type: none"> <li>Three new pumps are installed.</li> <li>Piping associated with pumps.</li> <li>New electrical gear, control panels, instrumentation are installed.</li> <li><b>Commissioned new pump.</b></li> <li><b>Began installation of final new pump.</b></li> <li><b>Completed 2 punch list items.</b></li> </ul>	<ul style="list-style-type: none"> <li>Installation of one new pump.</li> <li>New piping for return from lagoon system, including flow meter.</li> <li>Painting new piping.</li> <li>Punch list items.</li> </ul>
<b>Headworks</b>	Install new access platform, add overflow piping to screens, install concrete pad and trench drain for dumpster.	<ul style="list-style-type: none"> <li>All items completed.</li> <li><b>Completed 6 punch list items.</b></li> </ul>	<ul style="list-style-type: none"> <li>Punch list items.</li> </ul>
<b>Treatment Basin 1</b>	Install mixer, baffle wall, diffusers, sluice gate, effluent weir, dissolved oxygen (DO) probes, slide gate, splitter box	<ul style="list-style-type: none"> <li>All items completed.</li> <li><b>Completed 21 punch list items.</b></li> </ul>	<ul style="list-style-type: none"> <li>Punch list items.</li> </ul>
<b>Treatment Basin 2</b>	Install mixer, baffle wall, diffusers, sluice gate, effluent weir, DO probes, PH probes, and slide gate.	<ul style="list-style-type: none"> <li>All items completed.</li> <li><b>Completed 20 punch list items.</b></li> </ul>	<ul style="list-style-type: none"> <li>Punch list items.</li> </ul>
<b>Intermediate Mixed Liquor Recycle Pump Station</b>	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"> <li>All items completed.</li> <li><b>Began installation of piping to allow additional screening prior to membranes.</b></li> </ul>	<ul style="list-style-type: none"> <li>Punch list items.</li> </ul>
<b>Membrane Bioreactor and Equipment Building</b>	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	<ul style="list-style-type: none"> <li>All equipment, piping, instrumentation is installed and tested.</li> <li><b>Completed 70 punch list items.</b></li> </ul>	<ul style="list-style-type: none"> <li>MBR system is nearly ready for commissioning.</li> <li>Additional controls/programming items to be finalized.</li> <li>Punch list items.</li> </ul>

	hypochlorite and citric acid feeds, and instrumentation and controls.		
<b>Administration and Lab Building</b>	Construct new building (shared with MBR equipment) with lab, office, breakroom, bathroom, electrical room, and control room	<ul style="list-style-type: none"> <li>• All items completed.</li> </ul>	<ul style="list-style-type: none"> <li>• Punch list items.</li> </ul>
<b>Blower Building</b>	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.	<ul style="list-style-type: none"> <li>• All items completed.</li> <li>• <b>Automation of aeration system.</b></li> </ul>	<ul style="list-style-type: none"> <li>• Punch list items.</li> </ul>
<b>Digester</b>	Install new 4-inch diameter ductile iron air piping, diffusers, sluice gate, check valve, and decant piping.	<ul style="list-style-type: none"> <li>• Air piping installed.</li> <li>• Check Valve installed.</li> <li>• <b>Completed 7 punch list items.</b></li> </ul>	<ul style="list-style-type: none"> <li>• Correct sluice gate installation.</li> <li>• Decant piping.</li> <li>• Punch list items.</li> </ul>
<b>Lagoon Site</b>	Install motor operated valve, piping to return flow to WWTP, SCADA panel.	<ul style="list-style-type: none"> <li>• All items completed.</li> </ul>	<ul style="list-style-type: none"> <li>• Punch list items.</li> </ul>

## Construction Progress Photos



1. Conduit/Pullboxes Installed





2. Punchlist items addressed in MBR building



3. Finishing site work.



4. Installing final influent pump.





5. Installing additional piping for mixed liquor screening.