



July 11, 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 May 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, work continued on refining the biological treatment and membrane filtration processes. Supplemental carbon was acquired by the City and began being dosed to facilitate the denitrification process. With the arrival of the supplemental carbon, the membrane manufacturer began their formal 7-day performance test on July 2. Initial results indicate a successful test. The contractor continues to work on items throughout the plant. In the past month, the contractor worked on site finishes, completed the installation of the carbon feed system, and completed other miscellaneous items.

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

- Contractor will achieve Substantial Completion
- Contractor will work on punch list and project closeout items

Photos of construction completed progress are included with this letter.

The current construction schedule shows approximately 2 months of duration following the performance testing 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  
July 15, 2025  
Page - 2



Sincerely,

**Barge Design Solutions, Inc.**

A handwritten signature in black ink, appearing to read "Matthew Johnson".

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>Final electrical and communication pull boxes and conduit.</li> <li>General grading and site clean up.</li> <li>Began demolition of one structure</li> <li><b>Demolition of two structures.</b></li> <li><b>New sidewalks.</b></li> </ul>	<ul style="list-style-type: none"> <li>Paving the driveway.</li> <li>Punch list items.</li> </ul>
<b>Influent Pump Station</b>	Replace four pumps, select piping, and all associated instrumentation, controls, and electrical equipment.	<ul style="list-style-type: none"> <li>All new pumps are installed.</li> <li>Piping associated with pumps</li> <li>New electrical gear, control panels, and instrumentation are installed.</li> <li>New piping for return from lagoon system, including flow meter.</li> <li>Installed jib crane.</li> </ul>	<ul style="list-style-type: none"> <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> </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> </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> </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>Completed installation of piping to allow additional screening prior to membranes.</li> </ul>	<ul style="list-style-type: none"> <li>Punch list items.</li> </ul>
<b>Membrane Bioreactor and</b>	Construct new building (shared with administration and lab)	<ul style="list-style-type: none"> <li>All equipment, piping, instrumentation is installed and tested.</li> </ul>	<ul style="list-style-type: none"> <li>Additional controls/programming items to be finalized.</li> </ul>

<b>Equipment Building</b>	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"> <li>• MBR system commissioned and operational.</li> <li>• <b>Conducted MBR system performance test</b></li> <li>• <b>Completed installation of carbon feed system</b></li> <li>• Punch list items.</li> </ul>
<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> <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>• Automation of aeration system.</li> <li>• <b>Optimization of aeration system</b></li> <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>• Corrected sluice gate installation.</li> <li>• <b>Decant piping.</b></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> <li>• Punch list items.</li> </ul>

## Construction Progress Photos



1. New Sidewalks



07/03/2025 9:00 AM

2. New Sidewalks



3. New Stairs Installed



06/24/2025 8:50 AM

4. Site Clean Up



5. Supplemental Carbon Feed