

City of Jackson Water Crisis 2022
Incident Command Brief
September 2, 2022

INCIDENT OVERVIEW: The City of Jackson Surface Water System was impacted by recent flooding. Both the O.B. Curtis and J.H. Fewell water treatment plants have reduced water output creating pressure problems in the system. The City lacks sufficient pressures in some areas of the City to sustain adequate access to flush toilets and maintain optimal disinfection for drinking water. Both O.B. Curtis and J.H. Fewell water treatment plants lack sufficient Class A Operators and maintenance staff.

TREATMENT FACILITY STATUS:

- **O.B. Curtis**
 - Conventional Treatment Plant:
 - Authorized for **25** million gallons
 - Capacity of **18** million gallons
 - Producing **12** million gallons
 - Membrane Treatment Plant:
 - Authorized for **25** million gallons
 - Producing **7.6** million gallons

- **J.H. Fewell**
 - Authorized for **20** million gallons
 - Potential flex to **30** million gallons
 - Producing **21** million gallons

- **Tank/Well Status**
 - As of 1800HRS 9/2/2022, three (3) city tanks are holding water at low levels and the city PSI was operating at 73.38 PSI (O.B. Curtis 77 PSI). According to the city engineer, the bare minimum city PSI should be operating at 65PSI.

- **Surface Water Tank Levels** (these levels are for comparison purposes only. SCADA are located at different elevations)
 - Chastain: 23.58 ft.
 - Elaine: 3.04 ft.
 - Forest: 28.80 ft.
 - Livingston: 12.09 ft.
 - Lynch: 12.32 ft.
 - Magnolia: 30.70 ft.
 - Northwest: 10.31 ft.
 - Riverside: 18.47 ft.
 - Suncrest: 0.0 ft.
 - Presidential Hills: 30.90 ft.
 - Fortification/Mills Street: 24.21 ft.

- **Well System Tank Levels**
 - Cedar Hills: 25.77 ft.
 - Hwy. 18: 46.12 ft.
 - Spring Ridge: 50.95 ft.

CURRENT AND PLANNED OBJECTIVES:

- Assess and determine the status of the ammonia tanks. Transfer ammonia from tank 1 with the leaking valve to the empty adjacent tank 2 and begin pulling ammonia from tank 2. Replace corroded valve tank 1.
- Conduct an assessment on the Automatic Intake Structure (located on the southwestern portion of the Ross Barnett Reservoir). Determine functionality and viability of the automated intake system. Formulate a restoration plan. (assessment)
- Coordinate and document staffing needs as it pertains to treatment plants needs and assessments. (EMAC)
- Sedimentation Basin 3 – Priority
 - DEQ contractor E3 is developing a plan for sludge removal from Basin #3

- Met with three (3) vendors to provide scope and quotes to remove sludge from Equalization (EQ) Basin, Sedimentation Basin #3, and Sludge Handling Facility

PERSONNEL DEPLOYED TO O.B. CURTIS:

- MEMA: 8
- MISSISSIPPI DEPARTMENT OF HEALTH: 9
- CITY OF JACKSON: 5
- EPA: 2
- USACE: 8
- CSPIRE: 1
- FEMA: 1
- MDEQ: 1

OBJECTIVE UPDATES:

AMMONIA TANK:

- Tank # 2 has been assessed and repaired. DEQ along with E3 have taken over responsibility of the Ammonia Tank leak.
 - Southern Fabricators conducted prior repair to tank
- Requested real time weather update from NWS during the transfer of ammonia from tank #1

AUTOMATIC INTAKE STRUCTURE:

- Subject Matter Experts (SME) from the Florida Rural Water Association began working on solution to address the pH level issue at the Automatic Intake Structure.

INCOMING PERSONNEL

- Created tasks for incoming operators and mechanics:
 - September 3, 2022, task:
 - Polymer injection

- Soda ash activations
- Chemical injection site, cleaning injectors
- Replace valves
- Installing mixers (once ordered)

SITE SAFETY PLAN:

- A temporary fencing has been placed around the grassy area to avoid incoming traffic from parking over the wells.
- Road between the ammonia tanks and chemical building has been cordoned off to limit access to authorized personnel.

MEDIA:

- Media has been moved to gravel area adjacent to security hut for free flow of traffic in and out of the facility

MUTUAL AID:

- Requested Louisiana Department of Health Command Team
 - Update: First engineer arrived today, two (2) more who are drinking water engineers and Class A operators arrive tomorrow, third engineer will arrive Sunday.

RURAL WATER EMERGENCY ASSISTANCE COLLABORATIVE:

- Florida Team A-Team 2-man team – Arrived (09/02/2022; 08:00:00 CST)
 - Conducted assessment of plant
 - Meeting conducted to review assessment:
 - Suggested plan of action included:
 - parts needed replacing: flocculator, several valves (+ backups)
 - 5 lead operators to run facility (permanent)
 - quick connect to the liquid Soda Ash Pump
- Florida 4-man Team
 - Pending report from A Team on equipment needs

- Georgia (Monroe) 8 man “Class A” Membrane Team
 - Class A operator, Class A operator/electrician – Arrival Tomorrow

OTHER ACTIONS TAKEN:

- FEMA administrator, Deanne Criswell; Senior Advisor to the President, Mitch Landrieu; along with the Governor and Mayor of Jackson received an update brief from Incident Commanders and toured the facility at O.B. Curtis
- Liquid Soda ash totes arrived on site
 - Response personnel and contractor staged and awaiting plumbing to transport liquid soda ash to bulk tank
- Secured verbal agreement from The City of Morton to dispose of sludge solids in city lagoon, if needed
- Engaged vendor to restore flow to ammonia line for conventional disinfection
- Restored polymer feed to conventional treatment process