City of Jackson Water Crisis 2022
Incident Command Brief
September 3, 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 **15.8** million gallons
    - Membrane Treatment Plant:
        - Authorized for **25** million gallons
        - Producing **6.3** million gallons
    - Total:
        - City of Jackson: 44.1 million gallons

- **J.H. Fewell**
    - Authorized for **20** million gallons
    - Potential flex to **30** million gallons
    - Producing **22** million gallons

- **Tank/Well Status**
    - As of 1610HRS 9/3/2022, one (1) city tanks are holding water at low levels and the city PSI was operating at 80.04 PSI (O.B. Curtis 81.5 PSI). According to the city engineer, the bare minimum city PSI should be

operating at 65PSI. The Chastain tank will be the first tank to fill of the tanks supplied by O.B. Curtis and Riverside tank will be the first fill of tanks supplied by J.H. Fewell. Suncrest tank is at 3.35ft or at critical levels as of 1610HRS but is showing signs of improvements that has not been there in last three (3) days. The Byram tank, according to O.B. Curtis staff, is out of service and valved off.

- **Surface Water Tank Levels** (these levels are for comparison purposes only. SCADA are located at different elevations)
    - Chastain: 33.55 ft.
    - Elaine: 15.54 ft.
    - Forest: 33.68 ft.
    - Livingston: 22.34 ft.
    - Lynch: 23.17 ft.
    - Magnolia: 36.31 ft.
    - Northwest: 16.73 ft.
    - Riverside: 29.46 ft.
    - Suncrest: 3.35 ft.
    - Presidential Hills: 31.80 ft.
    - Fortification/Mills Street: 31.17 ft.

- **Well System Tank Levels**
    - Cedar Hills: 26.17 ft.
    - Hwy. 18: 13 ft.
    - Spring Ridge: 50.04 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)
    - pH levels taken from treatment plant as opposed to Automatic Intake Structure
        - Taking samples from raw water pump (O.B. Curtis every 4 hour(s), working to move to every 1 hour(s)
- 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
    - Assessing Sludge Lines
        - Identified valves were not functioning properly
    - Working on identifying issues with line from sludge basin to river
        - Restricted flow
    - 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: 9**
- **MSDH: 6**
- **CITY OF JACKSON: 2**
- **EPA: 1**
- **USACE: 2**
- **FEMA: 1**
- **MDEQ: 1**

OBJECTIVE UPDATES:

AMMONIA TANK:

- State on Scene Coordinator provided by Mississippi Department of Environmental Quality oversaw, and will continue to oversee, the transfer of

anhydrous ammonia from leaking tank at O.B. Curtis. Contractors will valve replacement on leaking tank on Sunday, September 4th.

SITE SAFETY PLAN:

- Safety Data Sheets out of date
    - Working on up-to-date Safety Data Sheets
- No emergency lighting in the chemical building
- Replacement lighting need in the filter gallery

MEDIA:

- Communication with JIC about burn-off of anhydrous ammonia. Press alert issued

RURAL WATER EMERGENCY ASSISTANCE COLLABORATIVE

- Florida Team A-Team 2-man team – Arrived (09/02/2022; 08:00:00 CST)
    - Identified need for large chemical pump
    - Established increased polymer feed
    - Assessed sedimentation basin operation
- Monroe, GA 8 person "Class A" Membrane Team
    - Class A operator, Class A operator/electrician – Arrived (09/03/2022; 08:00:00 CST)
        - Engineer team evaluating to see what is needed (e.g., materials, scope of work)
        - Replaced two (2) valves in the Membrane
            - Working to replace third valve
        - Assessed sludge treatment
- Louisiana Department of Health
    - Setting up in lab to begin hourly water sampling
        - Increase plant sampling for process control
        - Conducting jar testing
        - Assessed liquid soda ash
        - (Need key to intake house)

OTHER ACTIONS TAKEN:

- Assessed process for feeding liquid soda ash at rapid mix
- Engaged vendor to restore flow to ammonia water line for conventional disinfection (not new but pending)
- Staffing – Continuity Meeting held for consideration for staffing to conduct day to day operations at the plant following state involvement
    - Possible contract work
- Polymer pump back online (09/03/2022; 08:00:00 CST)
- Possible Short term/Long term goal discussion (09/03/2022; 10:00:00 CST)