

O.B. Curtis and J.H. Fewell Operational Summary (OPSUM) COJ Water Crisis 2022



November 14th, 2022, Report # 35 as of 1800 hrs.



SEOC Activation Level: Level 2 Partial Activation

WebEOC Event Name: COJ Water Crisis 2022

Crisis Track Event Name: COJ Water Crisis 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 had reduced water output that created pressure problems in the system. The City lacked 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 lacked sufficient Class A Operators and maintenance staff.

Dr. Daniel Edney, State Health Officer of the Mississippi State Department of Health, issued a Declaration of a Public Drinking Water Supply Emergency in the City of Jackson ordering the City including, but not limited to, employees of the Public Works Department and Emergency Management immediately cooperate with state response teams and contractors deployed to augment current staffing and to take remediation actions deemed necessary by the State Incident Commander. The Governor of Mississippi, Tate Reeves, has declared an emergency for the City of Jackson due to the effect on essential government services, medical facilities, and schools. A Unified Command has been established to combat this emergency.

Following two rounds of sample collection and bacti analyses in the Mississippi Public Health Laboratory, the state-imposed boil water notice for the City of Jackson was lifted at 1300, on 16 Sept 2022.

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A large group of EMAC (Emergency Management Assistance Compact) teams worked to improve maintenance and operations in both O.B. Curtis and J.H. Fewell. These teams included operators, mechanics, instrument technicians, and maintenance. The EPA Administrator and Assistant Attorney General Todd Kim from the Department of Justice met with City officials on September 26, 2022, to begin work on a judicially enforceable agreement that ensures a sustainable water system in the mid- and long-term.

At the end of the EMAC mission, an emergency contract for project management was expanded to include maintenance at O.B. Curtis and J.H. Fewell water treatment plants.

The City of Jackson's lead and copper water sample results were reported as measuring below the EPA Action Levels for both lead and copper.

Both the O.B. Curtis and J.H. Fewell facilities are operating in a limited capacity. Current operations are highly tenuous and either facility, or both, could fail and result in another water crisis as seen at the start of the incident.

* TREATMENT FACILITY STATUS

• O.B. Curtis

- Conventional Treatment Plant:
 - Authorized for **25** million gallons
 - Capacity of **20.8** million gallons
 - Producing **19.68** million gallons
- Membrane Treatment Plant:
 - Authorized for **25** million gallons

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- Producing **18.7** million gallons
- **J.H. Fewell**
 - Authorized for **20** million gallons
 - Potential flex to **30** million gallons
 - Producing **10.0** million gallons
- **Total:**
 - City of Jackson: **48.38** million gallons
 - As of 0800 hrs., City of Jackson was operating at **82** psi.

*Production numbers for O.B. Curtis and J.H. Fewell are averages based on data between the dates of:
11/08/22 and 11/12/22.

GENERAL SAFETY AWARENESS MESSAGE

Safety is the number one priority. The safety message ensures critical safety information is given to all personnel and that site-specific hazards are understood prior to permitting access to the work site, thereby creating a safer work environment, and facilitating the process of adjustment for responders, contractors, and visitors. Ensure one or more knowledgeable person(s) are assigned to guide guests/visitors through the water treatment plant or any individual facility following a safety brief conducted by the onsite Safety Officer. Three points of contact when ascending/descending stairs inside facilities. Observe surrounding crane activity and stay a safe distance away from live loads. Ensure personnel wear a high visibility vest, hard hat, and any other appropriate PPE correctly when moving throughout the plant. Keep a safe distance from hazardous materials and open/unsafe live electrical components. Upon entering a room where hazardous materials are present, identify safety eye wash stations. Do not touch or use equipment you are not certified to operate, this includes the opening and closing of valves. Do not operate any heavy equipment that belongs to the City of Jackson; if specific equipment is needed,

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please notify the Safety Officer or Incident Command for facilitation of that need. Avoid leaks of hazardous materials and liquids from piping system. Accidents, injuries, and illnesses need to be reported to the MSDH Safety Officer Chase Harrison, the MEMA Safety Officer David Battaly, or their designee.

FATALITIES/INJURIES

- No injuries reported

CURRENT AND PLANNED OBJECTIVES

O.B Curtis Water Treatment Facility:

- Repair high service pumps
- Conduct winterization
- Improve safety throughout facilities
- Establish automation and improve accuracy of electronics
- Staffing the operator shifts
- Monitor sludge handling process
- Establish process control for water treatment

J.H. Fewell Water Treatment Facility:

- Repair sump pumps in the raw water intake (round building)
- Repair Raw Service Pumps
- Conduct winterization
- Repair High Service Pumps #3 and #4
- Ensure facility operations maintain capabilities of 20 MGD with adequate resiliency

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- Ensure capacity to flex to 30 MGD to assist with maintenance activities at O.B. Curtis
- Repair Transfer Pump #2

PERSONNEL DEPLOYED TO THE INCIDENT

- MEMA: 2
- MSDH: 8
- MDEQ: 1
- CITY OF JACKSON: 2 in addition to O.B. Curtis personnel
- EPA: 4
- FEMA: 1

TASKS COMPLETED

Fewell response operations are at a minimum with personnel augmenting O.B. Curtis personnel as needed.

CITY OF JACKSON

- City of Jackson Water Conservation Advisory
- Precautionary boil water advisories issued until further notice for the following areas:
 - West Fortification Street

MISSISSIPPI STATE DEPARTMENT OF HEALTH

- Continued to provide support to the City of Jackson at O.B. Curtis and J.H. Fewell
- Continued to source parts for O.B. Curtis conventional, membrane and J.H. Fewell plants

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- Continuing task assignments and prioritization of tasks with project managers based on availability of parts
- Continuing special precautions for children under five and women who are pregnant
- Chemical totes emptied
 - Remaining containers to be removed by city contractor
- MSDH Logistics demobilized the Western Shelter Tent system at J.H. Fewell
- MSDH Logistics demobilized a Western Shelter Tent system at O.B. Curtis
- Provided orientation and initial training for Contract Operators at O.B. Curtis and J.H. Fewell
- Continued coordination with FEMA Planning Section on updating the Dashboard

CONTRACT PROJECT MANAGERS

- Assisted contractor on prepping the bottom casing of High Service Pump #4 at J.H. Fewell
- Applied epoxy, smoothed the flange face, and grinded out the bearing housing of High Service Pump #4 at J.H. Fewell
- Repaired small section of copper piping and pressure reducing valve coming from the ACH Room at O.B. Curtis
- Assisted contractor to with the use of an Arc Flash suit to put high voltage disconnect back online at O.B. Curtis
- Repaired spray nozzles and bearing on Convectional Filter Basins 1, 2, 3, 4, and 6 at O.B. Curtis
- All repaired filters were started up, backwashed, and put into service at O.B. Curtis

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DIRECT FEDERAL ASSISTANCE

EPA

- Continued on-site operational sampling at O.B. Curtis and J.H. Fewell
- Provided subject matter expertise, as needed, at both O.B. Curtis and J.H. Fewell
- Provided training to O.B. Curtis laboratory personnel on analysis for monochloramines and free ammonia
- Prepared draft EPA Transition plan
- Evaluated laboratory equipment and inventory of consumables at Curtis and Fewell
- Participated in weekly meeting with Mayor of Jackson
- Met with City of Jackson Short-Term and Long-Term Water Infrastructure and Resiliency Planning Group

FEMA

- Responded to requests for information from applicants
- Three staffers returned to ROR to support EM 3582
- Projects (3) – moving towards obligation

UNMET NEEDS: O.B. CURTIS

- Packing for pumps
- Update evacuation plans for facility
- Mitigate risk of future chlorine leaks while providing resiliency for disinfection
- 30 amp stainless disconnect for EQ basin crane
- Address safety hazards throughout O.B. Curtis plant
- Need for electrical repair and electrical panel for polymer pump and sludge clarifier
- Scope repairs to anhydrous ammonia tank #1
- Adequate tools and supplies

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- Computer monitor needed for operational room
- High Service Pumps 7, 8, and 11 are not functional currently, working with project managers to identify operating issues
- Repair hole in roof of chemical building

UNMET NEEDS: J.H. FEWELL

- Adequate tools and supplies
- Install repairs for high service pump 4
- Pump head studs
- Repair accurate SCADA communication between J.H. Fewell and O.B. Curtis
- Restore resiliency to raw and transfer pumps