

**POINT PAPER
ON
PROPOSED WASTEWATER TREATMENT IMPROVEMENT
WARD, ARKANSAS**

- **PURPOSE:** To outline the need and costs associated with improving the Ward Wastewater Treatment Plant.

- **HISTORY:**
 - **Current Plant Built in 1993:**
 - Maximum capacity:
 - Processing: 300,000 Gallons per Day (0.300 MGD)
 - Flowrate: 500,000 Gallons per Day (0.500 MGD)
 - Currently Processing (over a 13 month period):
 - Approximately 600,000 gallons per day (185% over capacity)
 - Maximum flowrate is 955,000 gallons per day (318% over capacity)
 - Violations: Between June 2014 and June 2015, the plant exceeded various permit limits 94 times.

 - **July 2015:**
 - City placed under a Consent Order by the Arkansas Department of Environmental Quality (ADEQ) to correct deficiencies with the existing facility
 - Order requires the City to seek and obtain funding to improve the facility.
 - Order requires the construction be completed and comply with permitted effluent limits within fifteen (15) months once funded.

 - **Population Serviced:**
 - 1993: 1,531
 - 2013: 4,452
 - 2030: 10,155

- **PROPOSED SOLUTION:**

○ **Construct a New Aeromod Facility and Expand the Existing Plant:**

- Capacity: 1,500,000 Gallons per Day (1.5 MGD)
- Similar to existing facility except the new facility will switch the processing from chlorine disinfection to UV which will greatly reduce chemical costs.
- No additional land is needed.
- New facility will be more energy efficient with little or no increase in energy use.
- Existing plant would continue to be used till new plant is fully operational.
 - Existing plant would then be retrofitted for flow surges, if ever needed.

○ **Costs:**

- Construction: \$4.8 Million (includes all phases of design, construction, fees, permits, etc)
 - Funding provided via a low-interest loan from USDA
 - Estimated Monthly Debt Service (payment): \$17,819.98
- Annual Operation and Maintenance: \$192,255.00 (est)
- See <https://www.wardarkansas.org/water-wastewater-department.html> for current rates

- **CONCLUSION:**

- Ward's existing Wastewater Treatment Plant is over capacity which resulted in the ADEQ issuing a Consent Order in July 2015.
- Considering the current population and forecast estimates, the City Council has approved the Mayor to obtain suitable financing to construct a new Aeromod Wastewater Treatment Plant as outlined above
 - Consideration was given to the economic impact to consumers and that any increase would be as minimal as possible; however, without a plan in place, AEDQ (and federal regulators) would force an upgrade which would result in a much higher cost to the consumer.

- **SUPPORTING MATERIAL:**

- A copy of the December 2015 Environmental Report for the Proposed Wastewater Treatment Improvement is available for viewing at City Hall.