

# A&D Water – Mountain Valley (Wastewater)

## Facility Information:

Wastewater System: PWS# NC0073741

Hendersonville, Henderson County, NC

~63 Service connections

Assets: Extended Aeration Package Plant, Aeration Basin, Clarifier, Sludge Holding Basin, Chlorine Contact Chamber, Dechlorinator, Effluent Flow Meter & Collection System with Lift Station

## Compliance History

Reviewing the EPA (ECHO) compliance history of the Mountain Valley plant shows a history of noncompliance. The facility has been in a state of non-compliance for 7 of the previous 12 quarters. The facility regularly violates limits for BOD, fecal coliform, total suspended solids, and pH. Additionally, the facility has specific violation for unapproved operation since May of 2018. In the last five years, the facility has 10 informal enforcement actions (Notices of Violation), and 6 formal enforcement actions with fines assessed totaling \$2,103. This all demonstrates a failure to properly operate and maintain the facility under current ownership.

## Description of need:

Mountain Valley Wastewater Treatment Plant is an extended aeration package plant. There are several areas with excessive rust and corrosion, which need to be inspected for potential structural failure. Divider between digester and aeration basin shows signs of rust and corrosion. Blower and pump control panels have debris buildup and excessive corrosion. Treatment System Tanks have surface & internal corrosion and rust creating leakage between the separate process units. Auto sampler is not functioning properly and will require further assessment. Outfall pipe was replaced but, old pipe was not removed from facility.

## Proposed Improvements:

In order to ensure the longevity and performance of the Mountain Valley Wastewater System, Red Bird Water Utility Operating Company plans to make improvements to the system. In order to ensure that operations can effectively respond to abnormal operating conditions and ensure proper operations, remote monitoring will be installed. Control panels for both blowers and duplex pump station will be clean from debris and corrosion. Divider between digester and aeration basin needs to be inspected and repaired or replaced, if required. Auto sampler needs to be repaired or replaced, after further assessment is performed. Surface corrosion on plant structure will be cleaned and repainted to prevent further corrosion and prevent future structural failure. A disinfection system utilizing sodium hypochlorite will be added for disinfection process and liquid sodium bisulfate for dichlorination. These improvements will ensure the system can provide safe and reliable service to customers and will bring the facilities into a maintainable condition moving forward.

<b>Mountain Valley</b>	
Item	Cost
Chain Link Fence Repair	\$10,000
Aeration Overhaul (Repairs & Replacement)	\$50,000
Remove Sludge from Existing Plant & Lagoon	\$30,000
Mission Remote Monitoring and Meters	\$18,000
Blower Building Repair	\$10,000
RAS Line Replacement and Clarifier Repairs	\$20,000
<b>Total</b>	<b>\$138,000</b>