City of Conover

2023 Annual Wastewater Report

This report is created and made available to you in compliance with House Bill 1160, The Clean Water Act of 1999. The City of Conover operates a collection system (WQCS00088), as well as the Northeast Wastewater Treatment Plant operated under the NPDES permit NC0024252. In total, Conover treated approximately 242 million gallons of wastewater in 2023. Whether it be the collection system, or the treatment facility, this wastewater is treated with environmental protection as the top priority. This report will demonstrate our commitment to finding problems, as well as mitigation, and resolving issues. If you have any questions or further concerns, please contact Eric Williams, Assistant Public Utilities Director, at (828)464-4808.

CONOVER

Northeast Wastewater Treatment Plant

3680 Hillview Dr, Conover

(828)465-2279

NPDES Permit #NC0024252

ORC- Andrew Evans

City of Conover's NEWWTP is permitted for 1.5 million gallons per day of wastewater treatment and has a present average daily flow of 0.650 MGD. The plant has mechanical grit and rag removal. The biological treatment is accomplished with four sequencing batch reactor basins. The plant has shallow bed sand filters and has hypochlorite disinfection and bisulfite dechlorination. Five personnel are based out of the Northeast Wastewater Treatment Plant. The plant discharges into Lyle Creek in the Catawba River Basin.

This plant deals with aging infrastructure every day. We are currently under contract for $7,000,000 worth of upgrades to the current facility. With these upgrades, we hope to stay within the limits set forth by our permit while also reducing energy consumption and being more environmentally friendly.

2023 Notice of Violations					
Date	Reason	Limit	Actual	Reason	Environmental Impact
Jun-23	NH3-N	2.0mg/L	2.22mg/L	High ambient temperature= Low Dissolved oxygen which inhibits nitrification	None
Jul-23	NH3-N	2.0mg/L	2.27mg/L	High ambient temperature= Low Dissolved oxygen which inhibits nitrification	None

Monitored Parameters	Permit Limits			Monthly Averages											
	Monthly	Weekly	Daily	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Flow (MGD)	1.5 MGD			0.97	0.91	0.77	0.85	0.72	0.72	0.66	0.65	0.4	0.38	0.39	0.56
BOD (Summer)	8.0 mg/L	12.0 mg/L					2.9	4.5	6.9	7.3	6.5	5.5	3.6		
BOD (Winter)	16.0 mg/L	24.0 mg/L		3.2	1.8	3.3								3	6.1
NH3-N (Summer)	2.0 mg/L	6.0mg/L					1.8	1.7	2.2	2.3	1.9	1.7	1.4		
NH3-N (Winter)	4.0mg/L	12.0 mg/L		1.5	1.7	1.8								0.9	1.8
TSS	30.0 mg/L	45.0 mg/L		0.4	0.3	0.3	0.4	0.6	1.1	2.6	1.3	0.6	0.5	0	0.3
pH	Between 6.0 and 9.0			7.2	7	6.9	6.9	7.3	7.4	7.3	7.3	7.1	7.1	7.1	7.3
Fecal Coliform	200/100 mL	400/100 mL		2.7	3.3	2.9	2.2	2.1	3.1	12.2	72.7	37.5	97.3	14.7	24.1
Total Residual Chlorine			28 µg/L	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
Chronic Toxicity	Pass or Fail			Pass			Pass			Pass			Pass		

City of Conover Sanitary Sewer Collection System

ORC- Thomas J. Miller Jr.

(828)464-4808

The City of Conover's collection system consist of 126 miles of sewer line, 2,855 manholes, with six (6) sewer lift stations. The collection system transports wastewater to the City of Conover's Northeast Wastewater Treatment Plant, and a portion to the City of Newton's Clark Creek Regional Wastewater Treatment Plant. The collection system serves homes, business, and industry alike. With our unwavering standards of service, we make sure each customer is treated equally when dealing with the sewer discharge. In 2023, our collections staff visited each pump station at a minimum of 1 time per week, with most weeks getting 2 visits. Each sewer aerial across a creek or body of water gets inspected at a minimum of twice per year. Our staff will inspect more after storms and adverse weather conditions.

In 2023 we flushed and used CCTV to inspect 80,052 feet of our sewer system. These two combined bring the total to 15.16 miles of line for a total of 12.4% of our collection system inspected. Another feat of our team is rehabbing manholes to mitigate the inflow and infiltration into our collection system. We rehabbed a total of 70 manholes in 2023. In 2023 we had 4 Sanitary Sewer Overflows, shown in the graph below.

2023 Sanitary Sewer Overflows					
Date	Location	Gallons Spilled	Cause	Impact	Fish Kill
1/4/2023	127 13th Ave SE	2160	Rags blocking line	150 gallons spilled in tributary to Mclin Creek	No
1/28/2023	805 13th St NW	300	Grease buildup on root ball	300 gallons spilled in Lyle Creek	No
3/7/2023	102 S Mclin Creek RD	250	Blockage due to pipe failure	250 gallons spilled in tributary to Long Creek	No
8/8/2023	2009 Keisler Dairy RD	2000	Storms knocked out power and trees blocked access to pump station	None	