

System Performance Data - Edith Wolford Elementary

In addition, here are some quick system facts and a legend for the wastewater characteristics.

Quick Facts

Building / Facilities: **School**
 Start-up: **Dec-04**
 Location: **Black Forest, CO**
 Designer / Engineer: **Kiowa Engineering**
 Contractor / Installer: **SRC Enterprises**
 Regulating Authority: **Colorado Department of Health**
 Design Flows: **7875 GPD**
 Grease Tank: **none - no kitchen facilities**
 Septic Tank: **35,000 gallons**
 Recirculation Tank: **8,000 gallons**
 Filters: **Six AX100's**
 Actual Loading Rate (gpd/ft²): **2.8**
 System Configuration: **Mode 1**
 Discharge: **UV disinfection with surface discharge**

Legend

BOD5: Biochemical Oxygen Demand (5 day, uninhibited)
 cBOD5: Carbonaceous Biochemical Oxygen Demand (5 day, inhibited)
 TSS: Total Suspended Solids
 TKN: Total Kjeldahl-Nitrogen (*Organic and Ammonia Nitrogen*)
 NH3-n: Ammonia-Nitrogen
 NO2-n: Nitrite-Nitrogen
 NO3-n: Nitrate-Nitrogen
 NOx: Nitrite + Nitrate
 TN: Total Nitrogen = (TKN) + (NO3-n) + (NO2-n)
 DO: Dissolved Oxygen
 pH: Measure of acidity, 7 is neutral. Wastewater w/value <5 or >9 are difficult to treat biologically
 Alk: Alkalinity
 TP: Total Phosphorus
 G&O: Grease and Oil
 FC: Fecal Coliform
 [Grey Box] Reported as less than

Notes: Data taken from DMR's provided by operator.

Date	GPD	Influent											
		BOD5	TSS	TKN	NH3	NO3	NOx	TN	pH	Alk	TP	G&O	FC
Dec-04	1000	340	736										
Jan-05	2000	135	411										
Feb-05	2000	461	648										
Mar-05	1500	320	495										
Apr-05	2000	548	1310	92.4			0	92.4		290			
May-05	2000	198	68	89.9			0	89.9		290			
Jun-05	3000	458	964										
Jul-05	500	104	77										
Aug-05	800	79	57										
Sep-05	2000	377	382										
Oct-05	2000	529	593										
Nov-05	2000	282	812										
Dec-05	1000	371	280										
AVE:	1677	323	526	91			0	91		290			

Effluent											
BOD5	TSS	TKN	NH3	NO3	NOx	TN	pH	Alk	TP	G&O	FC
10	10						7.2				31
29	25						6.5				131
16	13						6.6				0
8	5	13.9			39.3	53.2		14			12
14	20	46.4			29	75.4		12			19
7	19	4.4			26	30.4		12			5
6	10										5
6	5										3
5	5										3
13	12										135
7	9										10
18	21										10
16	33										34
12	14	22			31	53	7	13			31