ALLOWABLE EFFLUENT CONCENTRATION/LOADING
FOR CONSERVATIVE SUBSTANCES

Date of Analysis: 6/19/2020

This Calculates the Allowable Effluent Concentration/Loading for Conservative Substances in a Receiving Water

Discharge 001

Conservative Substance: Nitrate Nitrogen
Acute or Chronic Standard: Chronic
Discharger: Ensign Bickford
Receiving Water: Spanish Fork River
Classification: 2B, 3B, 3D, 4

Classification:
For the Season / Year
Yearly Average

Assumptions:
1) Conservative Substance
2) Complete mixing
3) Background Flow 7Q10 = 0 mg/l
4) Background Concentration 1 mg/l
5) Calculation utilizes 100% of mixed assimilative capacity

Receiving Water Information - Spanish Fork River
Flow, cfs 0.00
Flow, cfs (Acute) 0.00
Nitrate Nitrogen Load, lbs/day 0.00

Stream Standard
Nitrate Nitrogen, mg/l 10.0000
Allowable Loading Before Mix: 0.00 lbs/day
Acute / Chronic Standard [Toxics] Chronic

Combined Effluent/Receiving Water Information
Flow, cfs 3.340 cfs
Nitrate Nitrogen, mg/l 10.000000
Concentration Delta Increase, mg/l 9.000000 [Delta]
Percent Increase: 9.00

Summary
Background Conc: 1.000000 mg/l
Effluent Conc: 10.000000 mg/l
Combined Conc: 10.000000 mg/l
Standard: 10.000000 mg/l
Percent Change: 9.00

Flow Range Dependent Nitrate Nitrogen Effluent Limits
Flow (cfs) Nitrate N
0.00 - 0.56 10.0000
0.57 - 1.11 10.0000
1.12 - 1.67 10.0000
1.68 - 2.23 10.0000
2.24 - 2.79 10.0000
2.8 - 3.34 10.0000