

ALLOWABLE EFFLUENT CONCENTRATION/LOADING FOR CONSERVATIVE SUBSTANCES

Date of Analysis: 6/18/2020

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

Discharge 001

Conservative Substance:	RDX
Acute or Chronic Standard	Chronic
Discharger:	Ensign Bickford
Receiving Water:	Spanish Fork River
Classification:	2B, 3B, 3D, 4
For the Season / Year	Yearly Average

Assumptions:

- 1) Conservative Substance
- 2) Complete mixing
- 3) Background Flow 7Q10 =0 mg/l
- 4) Background Concentration 0.000001 mg/l
- 5) Calculation utilizes 100% of mixed assimilative capacity

Receiving Water Information - Spanish Fork River

Flow, cfs	0.000
Flow, cfs (Acute)	0.000
RDX, mg/l	0.00000
RDX Load, lbs/day	0.00

Stream Standard

RDX, mg/l	0.0020
Allowable Loading Before Mix:	0.00 lbs/day
Acute / Chronic Standard [Toxics]	Chronic

Combined Effluent/Receiving Water Information

Flow, cfs	0.560 cfs
RDX, mg/l	0.00200 mg/l
Concentration Delta Increase, mg/l	0.00200 mg/l [Delta]
Percent Increase:	1999.00

Summary

Background Conc:	0.00000 mg/l
Effluent Conc.	0.00200 mg/l
Combined Conc:	0.00200 mg/l
Standard:	0.00200 mg/l
Percent Change	1999.00

Effluent Information [Proposed] Ensign Bickford

Flow, cfs	0.5600
Flow, MGD	
Flow, cfs	0.560
RDX, mg/l	0.00200
RDX Load, lbs/day	0.01
RDX Load, kg/day	0.00
RDX Load, lbs/year	2.20
RDX Load, kg/year	1.00
RDX Load, tons/day	0.0000
RDX Load, tons/year	0.0
Dilution Ratio: (background:discharge)	0.00
Percent of Stream Flow Used in Calc.	100%

Flow Range Dependent RDX Effluent Limits

Flow (cfs)	RDX mg/l
0.00 -0.56	0.0020
0.57 -1.11	0.0020
1.12-1.67	0.0020
1.68-2.23	0.0020
2.24-2.79	0.0020
2.8-3.34	0.0020

