N.
N.P
153695

[mg/l = 3.8×10^{-6} Kg/gallon
ug/l = 3.8×10^{-9} Kg/gallon.]

* Amount of water ~ 3.1 M gallon
* Rate of discharge :- 1500 gallon/minute.
* Contaminants of Concern :-

			TOTAL (Kg)
Acetone	120 ug/l	(4.56×10^{-6} Kg/gallon)	(0.14 Kg)
2,4-dichlorophenol	20 ug/l	(7.6×10^{-8} Kg/g)	(0.24 Kg)
2-nitroaniline	180 ug/l	(6.84×10^{-7} Kg/g)	(2.1 Kg)
diethylphthalate	13 ug/l	(4.94×10^{-8} Kg/g)	(0.15 Kg)

Inorganic		TOTAL (Kg)
Ar	0.0045 mg/l	(0.05 Kg)
Cu	0.061 mg/l	(0.72 Kg)
Fe	2.15 mg/l	(25.3 Kg)
Pb	0.0060 mg/l	(0.071 Kg)
Mg	0.907 mg/l	(10.7 Kg)
Hg	0.0004 mg/l	(0.005 Kg)
Zn	0.213 mg/l	(2.51 Kg

OTHER CONTAMINANTS		TOTAL (Kg)
Cl^-	11 mg/l	(129.5 Kg)
F^-	0.23 mg/l	(2.7 Kg)
Phenols	0.05 mg/l	(0.059 Kg)
T.D.S	290 mg/l	(3416.2 Kg)
Sulfate	50 mg/l	(589.0 Kg)

Discharg per day

1500 gallon/min = $\frac{g}{min}$ x

$10^{-6} \times 10^{-3}$

FOR mg/l

$$x = \frac{mg}{l} \times \frac{10^{-6}\,\frac{Kg}{mg}}{\frac{0.26417(g)}{1l}}$$

$$x = \frac{\cancel{mg}}{\cancel{l}} \times 10^{-6}\,\frac{Kg}{\cancel{mg}} * \frac{\cancel{1l}}{0.26417\,g}$$

3,1000000

$\cancel{10^{-6}\,Kg}$

$$x = \frac{10^{-6}\,Kg}{0.26417\,g} = 3.8 \times 10^{-7}\ Kg/g$$

93
x 115

Battle
JILL
A dL20
SEAL

MTB

10 HRS/ day.

~~1g = 7.48 l.~~ 124 HRS TOTAL:

$L = 0.26417(g)$

$\frac{ug}{l} \times$

$$\frac{ug}{l} \times \frac{10^{-9}\,Kg}{ug} \times \frac{g\,l}{0.64}$$

$$x = \frac{ug}{l} \times \frac{10^{-9}\,Kg}{ug} \div \frac{l}{0.26417(g)}$$

$$\Rightarrow \frac{ug}{l} \times \frac{10^{-9}\,Kg}{ug} \times \frac{0.26417\,g}{l}$$

$$= \frac{ug}{l} \times \frac{\frac{10^{-9}\,Kg}{ug}}{\frac{0.l}{0.26417(g)}}$$

$$= \frac{ug}{l} \times \frac{10^{-9}\,Kg}{ug} \times \frac{0.26417\,g}{1\,l}$$

$$x = \frac{ug}{l} \times \frac{\frac{10^{-9}\,Kg}{ug}}{\frac{0.26417\,g}{1\,l}}$$

$$x = \frac{ug}{l} \times \frac{10^{-9}\,Kg}{ug} \times \frac{1\,l}{0.26417\,g}$$

$$x = \frac{10^{-9}}{0.26417}\,Kg/g \quad [ug/l] \quad \boxed{3.8 \times 10^{-9}\,Kg/g}$$