

**CALCULATIONS OF NEW MEXICO WATER QUALITY-BASED EFFLUENT LIMITATIONS**

NMAC 20.6.4. **NMWQS as of 2023**

Calculations Specifications:

Excel

**Revised (in red text) as of February 2023**

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10:37 AM

**STEP 1:** REFERENCE IMPLEMENTATION PROCEDURES  
INPUT FACILITY AND RECEIVING STREAM DATA  
LIST SOURCE OF DATA INPUT

**APPENDIX A**  
**of FACT SHEET**

IMPLEMENTATION PROCEDURES

The State of New Mexico Standards for Interstate and Intrastate Surface Waters are implemented in this spread sheet by using procedures established in the current "Procedures for Implementing NPDES Permits in New Mexico"

FACILITY

DATA INPUT

Permittee	Glenwood Hatchery
NPDES Permit No.	NM0030163
Outfall No.(s)	001
Plant Effluent Flow (MGD)	9.16
Plant Effluent Flow (cfs)	14.198

For industrial and federal facility, use the highest monthly average flow for the past 24 months. For POTWs, use the design flow.

RECEIVING STREAM

0

Receiving Stream Name	Whitewater Creek
Basin Name	San Francisco
Waterbody Segment Code No.	20.6.4.603
Is a publicly owned lake or reservoir (enter "1" if it's a lake, "0" if not)	0
Are acute aquatic life criteria considered (1= yes, 0= no)	1
Are chronic aquatic life criteria considered (1= yes, 0=no)	1
Are domestic water supply criteria considered (1= yes, 0=no)	1
Are irrigation water supply criteria considered (1= yes, 0=no)	1
Livestock watering and wildlife habitat criteria applied to all streams	

USGS Flow Station	USGS
WQ Monitoring Station No.	80WhiteW008.8
Receiving Stream TSS (mg/l)	9.06
Receiving Stream Hardness (mg/l as CaCO <sub>3</sub> )	42.15
Receiving Stream Critical Low Flow (4Q3) (cfs)	8.37
Receiving Stream Harmonic Mean Flow (cfs)	0.001
Avg. Receiving Water Temperature (C)	15.4
pH (Avg), Receiving Stream	7.81
Fraction of stream allowed for mixing (F)	1
Fraction of Critical Low Flow	1

For intermittent stream, enter effluent TSS  
For intermittent stream, enter effluent Hardness (If no data, 20 mg/l is used)  
Enter "0" for intermittent stream and lake.  
Enter harmonic mean or modified harmonic mean flow data or 0.001 if no data is available  
  
Enter 1, if stream morphology data is not available or for intermittent streams.

**STEP 2: INPUT AMBIENT AND EFFLUENT DATA**

**CALCULATE IN-STREAM WASTE CONCENTRATIONS**

DATA INPUT

Input pollutant geometric mean concentration as micro-gram per liter (ug/l or ppb) unless other unit is specified for the parameter.  
 Effluent value reported as "< detection level" (DL) but the DL is greater than MQL, input "1/2 DL" for calculation.  
 Effluent value reported as "< detection level" (DL) and the DL is smaller than MQL, no data is inputted.  
 If a less than MQL value is reported, input either the reported value or "0" for calculation.

The following formula is used to calculate the Instream Waste Concentration (Cd)  
 See the current "Procedures for Implementing NPDES Permits in New Mexico"  

$$Cd = [(F \cdot Qa \cdot Ca) + (Qe \cdot 2.13 \cdot Ce)] / (F \cdot Qa + Qe)$$
 Where:  
 Cd = Instream Waste Concentration  
 F = Fraction of stream allowed for mixing (see "Procedures for Implementing NPDES Permits in New Mexico")  
 Ce = Reported concentration in effluent  
 Ca = Ambient stream concentration upstream of discharge  
 Qe = Plant effluent flow  
 Qa = Critical low flow of stream at discharge point expressed as the 4Q3 or harmonic mean flow for human health criteria

The following formula convert metals reported in total form to dissolved form if criteria are in dissolved form

See the current "Procedures for Implementing NPDES Permits in New Mexico"

$Kp = Kpo \cdot (TSS^a)$       Kp = Linear partition coefficient; Kpo and a can be found in table below  
 $C/Ct = 1 / (1 + Kp \cdot TSS \cdot 10^{-6})$       TSS = Total suspended solids concentration found in receiving stream (or in effluent for intermittent stream)  
 Total Metal Criteria (Ct) = Cr / (C/Ct)      C/Ct = Fraction of metal dissolved; and Cr = Dissolved criteria value

Total Metals	Total Value	Stream Linear Partition Coefficient					Lake Linear Partition Coefficient				
		Kpo	alpha (a)	Kp	C/Ct	Dissolved Value in Stream	Kpo	alpha (a)	Kp	C/Ct	Dissolved Value in Lake
Arsenic		480000	-0.73	96058.90973	0.53467538	0	480000	-0.73	96058.90973	0.534675376	0
Chromium III		3360000	-0.93	432723.0739	0.20323257	0	2170000	-0.27	1196837.313	0.084435597	0
Copper		1040000	-0.74	203590.9519	0.35155143	0	2850000	-0.9	392129.4697	0.219650216	0
Lead		2800000	-0.8	480236.8406	0.18688285	0	2040000	-0.53	634384.0025	0.148202619	0
Nickel		490000	-0.57	139518.8884	0.44168809	0	2210000	-0.76	413975.6945	0.210498849	0
Silver		2390000	-1.03	246919.7664	0.30891914	0	2390000	-1.03	246919.7664	0.308919136	0
Zinc		1250000	-0.7	267251.5758	0.29228662	0	3340000	-0.68	746275.6861	0.128845097	0

The following formula is used to calculate hardness dependent criteria  
 (Please refer to State Water Quality Standards for details)

Dissolved  
 WQC (ug/l)

Aluminum (T)	Acute	$e(1.3695[\ln(\text{hardness})]+1.8308)$	1047.7716	If Stream pH < 6.5, enter 750 in cell O114
	Chronic	$e(1.3695[\ln(\text{hardness})]+0.9161)$	419.775859	If Stream pH < 6.5, enter 87 in cell P114
Cadmium (D)	Acute	$e(0.8968[\ln(\text{hardness})]-3.5699) \cdot CF1$	0.79071771	CF1 = 1.136672 - 0.041838*ln(hardness)
	Chronic	$e(0.7647[\ln(\text{hardness})]-4.2180) \cdot CF2$	0.24329186	CF2 = 1.101672 - 0.041838*ln(hardness)
Chromium III (D)	Acute	$0.316 e(0.819[\ln(\text{hardness})]+3.7256)$	280.804344	
	Chronic	$0.860 e(0.819[\ln(\text{hardness})]+0.6848)$	36.5268759	
Copper (D)	Acute	$0.960 e(0.9422[\ln(\text{hardness})]-1.700)$	5.95463153	
	Chronic	$0.960 e(0.8545[\ln(\text{hardness})]-1.702)$	4.28047097	
Lead (D)	Acute	$e(1.273[\ln(\text{hardness})]-1.46) \cdot CF3$	24.9237445	CF3 = 1.46203 - 0.145712*ln(hardness)
	Chronic	$e(1.273[\ln(\text{hardness})]-4.705) \cdot CF4$	0.97124254	CF4 = 1.46203 - 0.145712*ln(hardness)
Manganese (D)	Acute	$e(0.3331[\ln(\text{hardness})]+6.4676)$	2239.04625	
	Chronic	$e(0.3331[\ln(\text{hardness})]+5.8743)$	1237.07534	
Nickel (D)	Acute	$0.998 e(0.846[\ln(\text{hardness})]+2.255)$	225.446423	
	Chronic	$0.997 e(0.846[\ln(\text{hardness})]+0.0584)$	25.0401374	
Silver (D)	Acute	$0.85 e(1.72[\ln(\text{hardness})]-6.59)$	0.72789733	
Zinc (D)	Acute	$0.978 e(0.9094[\ln(\text{hardness})]+0.9095)$	72.9324167	
	Chronic	$0.986 e(0.90947[\ln(\text{hardness})]+0.6235)$	55.2540579	

POLLUTANTS	CAS No.	MQL	Instream Waste Concentration								Livestock& Wildlife Criteria	Acute Aquatic Criteria	Chronic Aquatic Criteria	Human Health Criteria	Need TMDL
			Ambient Conc.	Effluent Conc.	Acute Aquatic	Domestic Supply	Chronic Aquatic	Human Health	Domestic Criteria	Irrigation Criteria					
			Ca (ug/l)	Ce (ug/l)	2.13*Ce	Cd,dom (ug/l)	Cd (ug/l)	Cd,hh (ug/l)	ug/l	ug/l					
<b>Radioactivity, Nutrients, and Chlorine</b>															
Aluminum, total	7429-90-5	2.5	110	490	1043.7	697.4101648	982.26428	1043.6342	1E+100	1E+100	1E+100	1047.771598	419.77586	1E+100	N/A
Aluminum, dissolved	7429-90-5		56.3		0	20.88049451	3.7044348	0.0039651	1E+100	5000	1E+100	1E+100	1E+100	1E+100	N/A
Barium, dissolved	7440-39-3	100		4.8	10.224	6.432131868	9.5512799	10.22328	2000	1E+100	1E+100	1E+100	1E+100	1E+100	N/A
Boron, dissolved	7440-42-8	100			0	0	0	0	1E+100	750	5000	1E+100	1E+100	1E+100	N/A
Chloride	1688-70-06				0	0	0	0	1E+100	1E+100	1E+100	860000	230000	1E+100	N/A
Cobalt, dissolved	7440-48-4	50			0	0	0	0	1E+100	50	1000	1E+100	1E+100	1E+100	N/A
Uranium, dissolved	7440-61-1	0.1	1.3		0	0.482142857	0.0855376	9.156E-05	30	1E+100	1E+100	1E+100	1E+100	1E+100	N/A
Vanadium, dissolved	7440-62-2	50	2.83		0	1.049587912	0.1862087	0.0001993	1E+100	100	100	1E+100	1E+100	1E+100	N/A
Ra-226 and Ra-228 (pCi/l)					0	0	0	0	5	1E+100	30	1E+100	1E+100	1E+100	N/A
Strontium (pCi/l)					0	0	0	0	8	1E+100	1E+100	1E+100	1E+100	1E+100	N/A
Tritium (pCi/l)					0	0	0	0	20000	1E+100	20000	1E+100	1E+100	1E+100	N/A
Gross Alpha (pCi/l)					0	0	0	0	15	1E+100	15	1E+100	1E+100	1E+100	N/A
Asbestos (fibers/l)					0	0	0	0	7000000	1E+100	1E+100	1E+100	1E+100	1E+100	N/A
Total Residual Chlorine	7782-50-5	33			0	0	0	0	1E+100	1E+100	11	19	11	1E+100	N/A
Ammonia as N, total (mg/l)			0.09		0	0.033379121	0.0059218	6.338E-06	1E+100	1E+100	1E+100	Criterion	Criterion	1E+100	N/A
Nitrate as N (mg/l)					0	0	0	0	10	1E+100	1E+100	1E+100	1E+100	1E+100	N/A
Nitrite + Nitrate (mg/l)			0.207		0	0.076771978	0.0136202	1.458E-05	1E+100	1E+100	132	1E+100	1E+100	1E+100	N/A
<b>METALS AND CYANIDE</b>															
Antimony, dissolved (P)	7440-36-0	60			0	0	0	0	6	1E+100	1E+100	1E+100	1E+100	640	N/A
Arsenic, dissolved (P)	7440-38-2	0.5	1.17		0	0.433928571	0.0769838	8.24E-05	10	100	200	340	150	9	N/A
Beryllium, dissolved	7440-41-7	0.5			0	0	0	0	4	1E+100	1E+100	1E+100	1E+100	1E+100	N/A
Cadmium, dissolved	7440-43-9	1			0	0	0	0	5	10	50	0.790717715	0.2432919	1E+100	N/A
Chromium (III), dissolved	16065-83-1	10			0	0	0	0	1E+100	1E+100	1E+100	280.8043437	36.526876	1E+100	N/A
Chromium (VI), dissolved	18540-29-9	10			0	0	0	0	1E+100	1E+100	1E+100	16	11	1E+100	N/A
Chromium, dissolved	7440-47-3		1		0	0.370879121	0.0657981	7.043E-05	100	100	1000	1E+100	1E+100	1E+100	N/A
Copper, dissolved	7440-50-8	0.5	12	1.3	2.769	6.192585165	3.3763826	2.7696501	1300	200	500	5.95463153	4.280471	1E+100	Need TMDL
Iron	7439-89-6				0	0	0	0	1E+100	1E+100	1E+100	1E+100	1000	1E+100	N/A
Lead, dissolved	7439-92-1	0.5			0	0	0	0	15	5000	100	24.92374446	0.9712425	1E+100	N/A
Manganese, dissolved	7439-96-5		7.23		0	2.681456044	0.4757205	0.0005092	1E+100	1E+100	1E+100	2239.046251	1237.0753	1E+100	N/A
<b>Table 2: Instream Waste Concentration</b>															
POLLUTANTS	CAS No.	MQL	Instream Waste Concentration								Livestock& Wildlife Criteria	Acute Aquatic Criteria	Chronic Aquatic Criteria	Human Health Criteria	Need TMDL
			Ambient Conc.	Effluent Conc.	Acute Aquatic	Domestic Supply	Chronic Aquatic	Human Health	Domestic Criteria	Irrigation Criteria					
			Ca (ug/l)	Ce (ug/l)	2.13*Ce	Cd,dom (ug/l)	Cd (ug/l)	Cd,hh (ug/l)	ug/l	ug/l					
Mercury, dissolved	7439-97-6	0.005			0	0	0	0	1E+100	1E+100	1E+100	1.4	0.77	1E+100	N/A
Mercury, total	7439-97-6	0.005		0.0141	0.030033	0.018894387	0.0280569	0.0300309	2	1E+100	0.77	1E+100	1E+100	1E+100	N/A
Molybdenum, dissolved	7439-98-7				0	0	0	0	1E+100	1000	1E+100	1E+100	1E+100	1E+100	N/A
Molybdenum, total recoverable	7439-98-7				0	0	0	0	1E+100	1E+100	1E+100	7920	1895	1E+100	N/A
Nickel, dissolved (P)	7440-02-0	0.5			0	0	0	0	700	1E+100	1E+100	225.4464234	25.040137	4600	N/A
Selenium, dissolved (P)	7782-49-2	5			0	0	0	0	50	130	50	1E+100	1E+100	4200	N/A
Selenium, dis (SO4 >500 mg/l)		5			0	0	0	0	50	250	50	1E+100	1E+100	4200	N/A
Selenium, total recoverable	7782-49-2	5			0	0	0	0	1E+100	1E+100	5	20	5	1E+100	N/A
Silver, dissolved	7440-22-4	0.5			0	0	0	0	1E+100	1E+100	1E+100	0.727897329	1E+100	1E+100	N/A
Thallium, dissolved (P)	7440-28-0	0.5			0	0	0	0	2	1E+100	1E+100	1E+100	1E+100	0.47	N/A
Zinc, dissolved	7440-66-6	20	29		0	10.75549451	1.9081458	0.0020424	10500	2000	25000	72.93241666	55.254058	26000	N/A
Cyanide, total recoverable	57-12-5	10			0	0	0	0	200	1E+100	5.2	22	5.2	140	N/A
Dioxin	1746-01-6	0.00001			0	0	0	0	3.00E-05	1E+100	1E+100	1E+100	1E+100	5.1E-08	N/A

**VOLATILE COMPOUNDS**

Acrolein	107-02-8	50		0	0	0	0	18	1E+100	1E+100	3	3	400	N/A
Acrylonitrile	107-13-0	20		0	0	0	0	0.65	1E+100	1E+100	1E+100	1E+100	70	N/A
Benzene	71-43-2	10		0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	160	N/A
Bromoform	75-25-2	10		0	0	0	0	44	1E+100	1E+100	1E+100	1E+100	1200	N/A
Carbon Tetrachloride	56-23-5	2		0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	50	N/A
Chlorobenzene	108-90-7	10		0	0	0	0	100	1E+100	1E+100	1E+100	1E+100	800	N/A
Clorodibromomethane	124-48-1	10		0	0	0	0	4.2	1E+100	1E+100	1E+100	1E+100	210	N/A
Chloroform	67-66-3	50		0	0	0	0	57	1E+100	1E+100	1E+100	1E+100	2000	N/A
Chlorpyrifos	2921-88-2			0	0	0	0	1E+100	1E+100	1E+100	0.083	0.041	1E+100	N/A
Dichlorobromomethane	75-27-4	10		0	0	0	0	5.6	1E+100	1E+100	1E+100	1E+100	270	N/A
1,2-Dichloroethane	107-06-2	10		0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	6500	N/A
1,1-Dichloroethylene	75-35-4	10		0	0	0	0	7	1E+100	1E+100	1E+100	1E+100	20000	N/A
1,2-Dichloropropane	78-87-5	10		0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	310	N/A
1,3-Dichloropropylene	542-75-6	10		0	0	0	0	3.5	1E+100	1E+100	1E+100	1E+100	120	N/A
Ethylbenzene	100-41-4	10		0	0	0	0	700	1E+100	1E+100	1E+100	1E+100	130	N/A
Methyl Bromide	74-83-9	50		0	0	0	0	49	1E+100	1E+100	1E+100	1E+100	10000	N/A
Methylene Chloride	75-09-2	20		0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	10000	N/A
Mirex	2385-85-5			0	0	0	0	1E+100	1E+100	1E+100	1E+100	0.001	1E+100	N/A
1,2,4,5-Tetrachlorobenzene	95-94-3			0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	0.03	N/A
1,1,1,2-Tetrachloroethane	79-34-5	10		0	0	0	0	1.8	1E+100	1E+100	1E+100	1E+100	30	N/A
Tetrachloroethylene	127-18-4	10		0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	290	N/A
Toluene	108-88-3	10		0	0	0	0	1000	1E+100	1E+100	1E+100	1E+100	520	N/A
1,2-trans-Dichloroethylene	156-60-5	10		0	0	0	0	100	1E+100	1E+100	1E+100	1E+100	4000	N/A
Tributyltin (TBT)	Various			0	0	0	0	1E+100	1E+100	1E+100	0.46	0.072	1E+100	N/A
1,1,1-Trichloroethane	71-55-6			0	0	0	0	200	1E+100	1E+100	1E+100	1E+100	200000	N/A
1,1,2-Trichloroethane	79-00-5	10		0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	89	N/A
Trichloroethylene	79-01-6	10		0	0	0	0	5	1E+100	1E+100	1E+100	1E+100	70	N/A
Vinyl Chloride	75-01-4	10		0	0	0	0	2	1E+100	1E+100	1E+100	1E+100	16	N/A

**ACID COMPOUNDS**

2-Chlorophenol	95-57-8	10		0	0	0	0	175	1E+100	1E+100	1E+100	1E+100	800	N/A
2,4-Dichlorophenol	120-83-2	10		0	0	0	0	105	1E+100	1E+100	1E+100	1E+100	60	N/A
2,4-Dimethylphenol	105-67-9	10		0	0	0	0	700	1E+100	1E+100	1E+100	1E+100	3000	N/A
3-Methyl-4-chlorophenol	59-50-7			0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	2000	N/A
2-Methyl-4,6-dinitrophenol	534-52-1	50		0	0	0	0	14	1E+100	1E+100	1E+100	1E+100	30	N/A

## Instream Waste Concentration

POLLUTANTS	CAS No.	MQL	Instream Waste Concentration											TMDL	
			Ambient	Effluent	Acute	Domestic	Chronic	Human	Domestic	Irrigation	Livestock&	Acute	Chronic		Human
			Conc	Conc.	Aquatic	Supply	Aquatic	Health	Criteria	Criteria	Criteria	Aquatic	Aquatic		Health
			Ca (ug/l)	Ce (ug/l)	2.13°Ce	Cd,dom (ug/l)	Cd (ug/l)	Cd,hh (ug/l)	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
2,4-Dinitrophenol	51-28-5	50			0	0	0	0	70	1E+100	1E+100	1E+100	1E+100	300	N/A
Pentachlorophenol	87-86-5	50			0	0	0	0	1	1E+100	1E+100	19	15	30	N/A
Phenol	108-95-2	10			0	0	0	0	10500	1E+100	1E+100	1E+100	1E+100	860000	N/A
2,4,5-Trichlorophenol	95-95-4				0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	600	N/A
2,4,6-Trichlorophenol	88-06-2	10			0	0	0	0	32	1E+100	1E+100	1E+100	1E+100	28	N/A
2-(2,4,5-Trichlorophenoxy)propionic acid (Silvex)					0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	400	N/A

## BASE/NEUTRAL

Acenaphthene	83-32-9	10	0	0	0	0	2100	1E+100	1E+100	1E+100	1E+100	90	N/A
Anthracene	120-12-7	10	0	0	0	0	10500	1E+100	1E+100	1E+100	1E+100	400	N/A
Benzidine	92-87-5	50	0	0	0	0	0.0015	1E+100	1E+100	1E+100	1E+100	0.11	N/A
Benzo(a)anthracene	56-55-3	5	0	0	0	0	0.048	1E+100	1E+100	1E+100	1E+100	0.013	N/A
Benzo(a)pyrene	50-32-8	5	0	0	0	0	0.2	1E+100	1E+100	1E+100	1E+100	0.0013	N/A
3,4-Benzofluoranthene	205-99-2	10	0	0	0	0	0.048	1E+100	1E+100	1E+100	1E+100	0.0013	N/A
Benzo(k)fluoranthene	207-08-9	5	0	0	0	0	0.048	1E+100	1E+100	1E+100	1E+100	0.13	N/A
Bis(2-chloroethyl)Ether	111-44-4	10	0	0	0	0	0.3	1E+100	1E+100	1E+100	1E+100	22	N/A
Bis(2-chloro-1-methylethyl) ethc	108-60-1	10	0	0	0	0	1400	1E+100	1E+100	1E+100	1E+100	4000	N/A
Bis(2-ethylhexyl)Phthalate	117-81-7	10	0	0	0	0	6	1E+100	1E+100	1E+100	1E+100	3.7	N/A
Bis(chloromethyl) ether	542-88-1		0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	0.17	N/A
Butyl Benzyl Phthalate	85-68-7	10	0	0	0	0	7000	1E+100	1E+100	1E+100	1E+100	1	N/A
Carbaryl	63-25-2		0	0	0	0	1E+100	1E+100	1E+100	2.1	2.1	1E+100	N/A
2-Chloronapthalene	91-58-7	10	0	0	0	0	2800	1E+100	1E+100	1E+100	1E+100	1000	N/A
Chrysene	218-01-9	5	0	0	0	0	0.048	1E+100	1E+100	1E+100	1E+100	1.3	N/A
Demeton	8065-48-3		0	0	0	0	1E+100	1E+100	1E+100	1E+100	0.1	1E+100	N/A
2,4-Dichlorophenoxyacetic acid	94-75-7		0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	12000	N/A
Dibenzo(a,h)anthracene	53-70-3	5	0	0	0	0	0.048	1E+100	1E+100	1E+100	1E+100	0.0013	N/A
1,2-Dichlorobenzene	95-50-1	10	0	0	0	0	600	1E+100	1E+100	1E+100	1E+100	3000	N/A
1,3-Dichlorobenzene	541-73-1	10	0	0	0	0	469	1E+100	1E+100	1E+100	1E+100	10	N/A
1,4-Dichlorobenzene	106-46-7	10	0	0	0	0	75	1E+100	1E+100	1E+100	1E+100	900	N/A
3,3'-Dichlorobenzidine	91-94-1	5	0	0	0	0	0.78	1E+100	1E+100	1E+100	1E+100	1.5	N/A
Diethyl Phthalate	84-66-2	10	0	0	0	0	28000	1E+100	1E+100	1E+100	1E+100	600	N/A
Dimethyl Phthalate	131-11-3	10	0	0	0	0	350000	1E+100	1E+100	1E+100	1E+100	2000	N/A
Di-n-Butyl Phthalate	84-74-2	10	0	0	0	0	3500	1E+100	1E+100	1E+100	1E+100	30	N/A
2,4-Dinitrotoluene	121-14-2	10	0	0	0	0	1.1	1E+100	1E+100	1E+100	1E+100	17	N/A
1,2-Diphenylhydrazine	122-66-7	20	0	0	0	0	0.44	1E+100	1E+100	1E+100	1E+100	2	N/A
Fluoranthene	206-44-0	10	0	0	0	0	1400	1E+100	1E+100	1E+100	1E+100	20	N/A
Fluorene	86-73-7	10	0	0	0	0	1400	1E+100	1E+100	1E+100	1E+100	70	N/A
Guthion	86-50-0		0	0	0	0	1E+100	1E+100	1E+100	1E+100	0.01	1E+100	N/A
Hexachlorobenzene	118-74-1	5	0	0	0	0	1	1E+100	1E+100	1E+100	1E+100	0.00079	N/A
Hexachlorobutadiene	87-68-3	10	0	0	0	0	4.5	1E+100	1E+100	1E+100	1E+100	0.1	N/A
Hexachlorocyclohexane (HCH)-	608-73-1		0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	0.1	N/A
Hexachlorocyclopentadiene	77-47-4	10	0	0	0	0	50	1E+100	1E+100	1E+100	1E+100	4	N/A
Hexachloroethane	67-72-1	20	0	0	0	0	25	1E+100	1E+100	1E+100	1E+100	1	N/A
Indeno(1,2,3-cd)Pyrene	193-39-5	5	0	0	0	0	0.048	1E+100	1E+100	1E+100	1E+100	0.013	N/A
Isophorone	78-59-1	10	0	0	0	0	368	1E+100	1E+100	1E+100	1E+100	18000	N/A
Malathion	121-75-5		0	0	0	0	1E+100	1E+100	1E+100	1E+100	0.1	1E+100	N/A
Methoxychlor	72-43-5		0	0	0	0	1E+100	1E+100	1E+100	1E+100	0.03	0.02	N/A
Nitrobenzene	98-95-3	10	0	0	0	0	18	1E+100	1E+100	1E+100	1E+100	600	N/A
Nitrosamines	Various		0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	12.4	N/A
Nitrosodibutylamine	924-16-3		0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	2.2	N/A
Nitrosodiethylamine	55-18-5		0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	12.4	N/A
n-Nitrosodimethylamine	62-75-9	50	0	0	0	0	0.0069	1E+100	1E+100	1E+100	1E+100	30	N/A
n-Nitrosodi-n-Propylamine	621-64-7	20	0	0	0	0	0.05	1E+100	1E+100	1E+100	1E+100	5.1	N/A
n-Nitrosodiphenylamine	86-30-6	20	0	0	0	0	71	1E+100	1E+100	1E+100	1E+100	60	N/A
N-Nitrosopyrrolidine	930-55-2		0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	340	N/A
Nonylphenol	84852-15-3		0	0	0	0	1E+100	1E+100	1E+100	28	6.6	1E+100	N/A
Parathion	56-38-2		0	0	0	0	1E+100	1E+100	1E+100	0.065	0.013	1E+100	N/A
Pentachlorobenzene	608-93-5		0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	0.1	N/A
Pyrene	129-00-0	10	0	0	0	0	1050	1E+100	1E+100	1E+100	1E+100	4000	N/A
1,2,4-Trichlorobenzene	120-82-1	10	0	0	0	0	70	1E+100	1E+100	1E+100	1E+100	0.76	N/A

POLLUTANTS	CAS No.	MQL	Instream Waste Concentration							Livestock& Wildlife Criteria ug/l	Acute Aquatic Criteria ug/l	Chronic Aquatic Criteria ug/l	Human Health Criteria ug/l	Need TMDL	
			Ambient Conc Ca (ug/l)	Effluent Conc. Ce (ug/l)	Acute Aquatic 2.13*Ce	Domestic Supply Cd,dom (ug/l)	Chronic Aquatic Cd (ug/l)	Human Health Cd,hh (ug/l)	Domestic Criteria ug/l						Irrigation Criteria ug/l
<b>PESTICIDES AND PCBS</b>															
Aldrin	309-00-2	0.01			0	0	0	0	0.021	1E+100	1E+100	3	1E+100	0.0000077	N/A
Alpha-BHC	319-84-6	0.05			0	0	0	0	0.056	1E+100	1E+100	1E+100	1E+100	0.0039	N/A
Beta-BHC	319-85-7	0.05			0	0	0	0	0.091	1E+100	1E+100	1E+100	1E+100	0.14	N/A
gamma-BHC (Lindane)	58-89-9	0.05			0	0	0	0	0.2	1E+100	1E+100	0.95	1E+100	4.4	N/A
Chlordane	57-74-9	0.2			0	0	0	0	2	1E+100	1E+100	2.4	0.0043	0.0032	N/A
Dichlorodiphenyldichloroethane (DDD)					0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	0.0012	N/A
Dichlorodiphenyldichloroethylene (DDE)					0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	0.00018	N/A
Dichlorodiphenyltrichloroethane (DDT)					0	0	0	0	1E+100	1E+100	1E+100	1E+100	1E+100	0.0003	N/A
4,4'-DDT and derivatives	50-29-3	0.02			0	0	0	0	1	1E+100	0.001	1.1	0.001	1E+100	N/A
Dieldrin	60-57-1	0.02			0	0	0	0	0.022	1E+100	1E+100	0.24	0.056	0.000012	N/A
Diazinon	333-41-5				0	0	0	0	1E+100	1E+100	1E+100	0.17	0.17	1E+100	N/A
Alpha-Endosulfan	959-98-8	0.01			0	0	0	0	62	1E+100	1E+100	0.22	0.056	30	N/A
Beta-Endosulfan	33213-65-9	0.02			0	0	0	0	62	1E+100	1E+100	0.22	0.056	40	N/A
Endosulfan sulfate	1031-7-8	0.1			0	0	0	0	62	1E+100	1E+100	1E+100	1E+100	40	N/A
Endrin	72-20-8	0.02			0	0	0	0	2	1E+100	1E+100	0.086	0.036	0.03	N/A
Endrin Aldehyde	7421-93-4	0.1			0	0	0	0	10.5	1E+100	1E+100	1E+100	1E+100	1	N/A
Heptachlor	76-44-8	0.01			0	0	0	0	0.4	1E+100	1E+100	0.52	0.0038	0.000059	N/A
Heptachlor Epoixde	1024-57-3	0.01			0	0	0	0	0.2	1E+100	1E+100	0.52	0.0038	0.00032	N/A
PCBs	336-36-3	0.2			0	0	0	0	0.5	1E+100	0.014	2	0.014	0.00064	N/A
Toxaphene	8001-35-2	0.3			0	0	0	0	3	1E+100	1E+100	0.73	0.0002	0.0071	N/A









