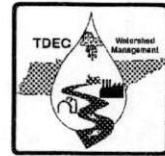




PLANNING LIMITS WORKSHEET



Date Requested 12/22/1998 Requestor Woody Smith Office KEAC

Watershed (HUC#) 05130104 USGS Quad 128NW NPDES# TN0020753

Facility Name Huntsville STP Design Flow 0.3

City Huntsville County Scott

Units

MGD

CFS

STREAM INFORMATION

Stream Name New River Stream Reach 5.37

Facility Discharge Point 14.6 Stream Flow Summer (cfs) 0.46

Winter (cfs) 0.46

Drainage Area (mi2) 300

How 7Q10 was obtained

Station 03407990 in Water-Resources Investigations Report 95-4293

Stream Classified Uses (Check all that apply)

- Domestic Water Supply
- Fish and Aquatic Life
- Irrigation
- Industrial Water Supply

- Livestock Watering
- Navigation
- Recreation
- Trout Stream

POINT SOURCE LOADS

Point Load #1	<input type="text"/>	Flow (cfs)	<input type="text"/>	Discharge Mile	<input type="text"/>
Point Load #2	<input type="text"/>	Flow (cfs)	<input type="text"/>	Discharge Mile	<input type="text"/>
Point Load #3	<input type="text"/>	Flow (cfs)	<input type="text"/>	Discharge Mile	<input type="text"/>
Point Load #4	<input type="text"/>	Flow (cfs)	<input type="text"/>	Discharge Mile	<input type="text"/>

SIGNIFICANT TRIBUTARIES

Significant Trib #1	<input type="text"/>	7Q10	<input type="text"/>
Significant Trib #2	<input type="text"/>	7Q10	<input type="text"/>
Significant Trib #3	<input type="text"/>	7Q10	<input type="text"/>
Significant Trib #4	<input type="text"/>	7Q10	<input type="text"/>
Significant Trib #5	<input type="text"/>	7Q10	<input type="text"/>

WATER WITHDRAWALS

Water Withdrawal #1	<input type="text"/>	Withdrawal Flow (cfs)	<input type="text"/>	Mile	<input type="text"/>
Water Withdrawal #2	<input type="text"/>	Withdrawal Flow (cfs)	<input type="text"/>	Mile	<input type="text"/>
Water Withdrawal #3	<input type="text"/>	Withdrawal Flow (cfs)	<input type="text"/>	Mile	<input type="text"/>

BACKGROUND CONDITIONS

Summer Temperature	<input type="text" value="25"/>	CBOD	<input type="text" value="1.5"/>	Previous Permit Limits	<input type="text" value="10/1.5/6"/>
Winter Temperature	<input type="text" value="15"/>	N	<input type="text" value="0.1"/>	Automatic Removal Rates Used	<input checked="" type="checkbox"/>
	<input type="text" value="Data Obtained"/>	DO	<input type="text" value="6"/>	Instream NH3-N Summer	<input type="text"/>
	<input type="radio"/> Storet			Instream NH3-N Winter	<input type="text"/>
	<input checked="" type="radio"/> Agreement				
	<input type="radio"/> Other				

STREAM SEGMENTS

Segment #1	<input type="text" value="RM 14.6 (Huntsville)"/>	Elevation (ft)	<input type="text" value="1158"/>	Mileage (mi)	<input type="text" value="0"/>		
Segment #2	<input type="text" value="RM14.6 to RM 9.98 (Brimstone Ck)"/>	Elevation (ft)	<input type="text" value="1145"/>	Mileage (mi)	<input type="text" value="4.62"/>	Slope #1	<input type="text" value="2.84"/>
Segment #3	<input type="text" value="RM 9.98 to RM 8.44"/>	Elevation (ft)	<input type="text" value="1137"/>	Mileage (mi)	<input type="text" value="1.54"/>	Slope #2	<input type="text" value="5.51"/>
Segment #4	<input type="text" value="RM 8.44 to RM 5.24"/>	Elevation (ft)	<input type="text" value="1136"/>	Mileage (mi)	<input type="text" value="3.2"/>	Slope #3	<input type="text" value="0.1"/>
Segment #5	<input type="text" value="RM 5.24 to RM 4.63"/>	Elevation (ft)	<input type="text" value="1132"/>	Mileage (mi)	<input type="text" value="0.59"/>	Slope #4	<input type="text" value="7.71"/>
Segment #6	<input type="text"/>	Elevation (ft)	<input type="text"/>	Mileage (mi)	<input type="text"/>	Slope #5	<input type="text"/>
Segment #7	<input type="text"/>	Elevation (ft)	<input type="text"/>	Mileage (mi)	<input type="text"/>	Slope #6	<input type="text"/>
Segment #8	<input type="text"/>	Elevation (ft)	<input type="text"/>	Mileage (mi)	<input type="text"/>	Slope #7	<input type="text"/>

Recommended Limits	<input type="text" value="4.10/1.5/6"/>	Comments	<input type="text" value="Winter flow used was the same as summer flow."/>
--------------------	---	----------	--

Modeled by	<input type="text" value="Rich Cochran (REC)"/>	Date	<input type="text" value="12/14/1999"/>
Approved by	<input type="text" value="Shirley W. [Signature]"/>	Date	<input type="text" value="1/12/2000"/>

Cal

DIVISION OF WATER POLLUTION CONTROL
STREAM MODELING OUTPUT FILE VERSION 1.04

DATE: 12/14/99 CHECKED BY COUNTY: Scott
FACILITY: Huntsville STP QUAD: 128NS
STREAM: New River BASIN: South Fork Cumberland

** K1=CBOD REMOVAL K2=REAERATION
BACKGROUND CONDITIONS ** K3=NITROGENOUS DEOXYGENATION
** K4=CBOD DECAY K5=SOD

CBOD (mg/l) . . . : 1.5
NH3-N (mg/l) . . . : 0.10
DO (mg/l) . . . : 6.00
TEMP (C) . . . : 25.00

SUMMER RUN

FLOW (cfs) . . . : 0.46

SEGMENT NO. 1 OF 4

SEGMENT NAME: Outfall to rm 9.8
PERMIT NO: TN0020753

K VALUES FOR REMOVAL RATE ARE DEFAULT UNLESS
MARKED WITH () WHICH INDICATES ENTERED BY MODELER

K1= 0.39 K2= 0.58 K3= 0.39 K4= 0.39 TEMP CORRECTED

K1= 0.30 K2= 0.51 K3= 0.30 K4= 0.30 UNCORRECTED

K2 (1/day) AT 20 C : 0.51
SLOPE (ft/mi) OF SEGMENT: 2.84

STREAM VELOCITY (fps) : 0.100
TEMPERATURE USED THIS SEGMENT. . . : 25.00
DISCHARGER FLOWRATE (cfs)/(MGD) . . : 0.464 / 0.3000

PROPOSED STANDARDS

CBOD (mg/l) . . . : 4.0
NH3-N (mg/l) . . . : 1.50
DO (mg/l) . . . : 6.00

*Q, cross section
Rm
measmt*

~ 1 mile per

① UIS (Q) cross section Rm
Do
PH
conduc
Temp
CBOD5-
NH3-

② RM 13
" 11
" 9

R.M.	SEG.LEN	TOTAL TIME	TOTAL CBOD	TOXIC AMMONIA-N	pH ABOVE
MILES	MILES	HOURS	mg/l	mg/l	SU

Cal

```

*****
14.600  0.000  0.000  2.756  0.803  6.000  7.98
14.100  0.500  7.333  2.443  0.712  5.575  8.03
13.600  1.000  14.667  2.166  0.631  5.308  8.09
13.100  1.500  22.000  1.920  0.560  5.163  8.14
12.600  2.000  29.333  1.702  0.496  5.113  8.20  <- D.O. SAG
12.100  2.500  36.667  1.509  0.440  5.133  8.26
11.600  3.000  44.000  1.338  0.390  5.205  8.32
11.100  3.500  51.333  1.186  0.346  5.315  8.37
10.600  4.000  58.667  1.052  0.307  5.450  8.43
10.100  4.500  66.000  0.932  0.272  5.602  8.50
9.980   4.620  67.760  0.827  0.241  5.764  8.56

```

SEGMENT NO. 2 OF 4

SEGMENT NAME: Rm 9.98 to 8.44
PERMIT NO:

K VALUES FOR REMOVAL RATE ARE DEFAULT UNLESS
MARKED WITH () WHICH INDICATES ENTERED BY MODELER

K1= 0.39 K2= 1.12 K3= 0.39 K4= 0.39 TEMP CORRECTED

K1= 0.30 K2= 0.99 K3= 0.30 K4= 0.30 UNCORRECTED

K2 (1/day) AT 20 C : 0.99
SLOPE (ft/mi) OF SEGMENT: 5.51

STREAM VELOCITY (fps) : 0.100
TEMPERATURE USED THIS SEGMENT. . . : 25.00
DISCHARGER FLOWRATE (cfs)/(MGD) . . : 0.000 / 0.0000

PROPOSED STANDARDS

CBOD (mg/l) . . : 4.0
NH3-N (mg/l) . . : 1.50
DO (mg/l) . . . : 6.00

```

*****
R.M.      SEG.LEN  TOTAL    TOXIC pH
          MILES   TIME    CBOD  AMMONIA-N  DO  ABOVE
-----
MILES    MILES   HOURS  mg/l  mg/l  mg/l  SU
*****
9.980    0.000  67.760  0.827  0.241  5.764  8.56  <- D.O. SAG
9.880    0.100  69.227  0.807  0.235  5.876  8.57
9.780    0.200  70.693  0.788  0.230  5.983  8.58
9.680    0.300  72.160  0.769  0.224  6.083  8.60

```

							Cal
9.580	0.400	73.627	0.751	0.219	6.178	8.61	
9.480	0.500	75.093	0.733	0.214	6.268	8.62	
9.380	0.600	76.560	0.715	0.209	6.353	8.63	
9.280	0.700	78.027	0.698	0.204	6.434	8.65	
9.180	0.800	79.493	0.682	0.199	6.510	8.66	
9.080	0.900	80.960	0.666	0.194	6.583	8.67	
8.980	1.000	82.427	0.650	0.189	6.651	8.69	
8.880	1.100	83.893	0.634	0.185	6.716	8.70	
8.780	1.200	85.360	0.619	0.180	6.778	8.71	
8.680	1.300	86.827	0.604	0.176	6.837	8.73	
8.580	1.400	88.293	0.590	0.172	6.892	8.74	
8.480	1.500	89.760	0.576	0.168	6.945	8.76	
8.440	1.540	90.347	0.562	0.164	6.996	8.77	

SEGMENT NO. 3 OF 4

SEGMENT NAME: Rm 8.44 to RM 5.4

PERMIT NO:

K VALUES FOR REMOVAL RATE ARE DEFAULT UNLESS MARKED WITH () WHICH INDICATES ENTERED BY MODELER

K1= 0.39 K2= 0.02 K3= 0.39 K4= 0.39 TEMP CORRECTED

K1= 0.30 K2= 0.02 K3= 0.30 K4= 0.30 UNCORRECTED

K2 (1/day) AT 20 C : 0.02

SLOPE (ft/mi) OF SEGMENT: 0.10

STREAM VELOCITY (fps) : 0.100

TEMPERATURE USED THIS SEGMENT. . . : 25.00

DISCHARGER FLOWRATE (cfs)/(MGD) . : 0.000 / 0.0000

PROPOSED STANDARDS

CBOD (mg/l) . . : 4.0

NH3-N (mg/l) . . : 1.50

DO (mg/l) . . . : 6.00

R.M.	SEG.LEN	TOTAL TIME	TOXIC CBOD	pH AMMONIA-N	DO	ABOVE
MILES	MILES	HOURS	mg/l	mg/l	mg/l	SU
8.440	0.000	90.347	0.562	0.164	6.996	8.77
7.940	0.500	97.680	0.499	0.145	6.828	8.84
7.440	1.000	105.013	0.442	0.129	6.681	8.92

							Cal
6.940	1.500	112.347	0.392	0.114	6.553	8.99	
6.440	2.000	119.680	0.347	0.101	6.441	9.08	+
5.940	2.500	127.013	0.308	0.090	6.344	9.17	+
5.440	3.000	134.347	0.273	0.080	6.260	9.27	+
5.400	3.040	134.933	0.242	0.071	6.187	9.39	+

SEGMENT NO. 4 OF 4

SEGMENT NAME: 5.24 to 4.63

PERMIT NO:

K VALUES FOR REMOVAL RATE ARE DEFAULT UNLESS MARKED WITH () WHICH INDICATES ENTERED BY MODELER

K1= 0.39 K2= 1.56 K3= 0.39 K4= 0.39 TEMP CORRECTED

K1= 0.30 K2= 1.39 K3= 0.30 K4= 0.30 UNCORRECTED

K2 (1/day) AT 20 C : 1.39

SLOPE (ft/mi) OF SEGMENT: 7.71

STREAM VELOCITY (fps) : 0.100

TEMPERATURE USED THIS SEGMENT. . . : 25.00

DISCHARGER FLOWRATE (cfs)/(MGD) . : 0.000 / 0.0000

PROPOSED STANDARDS

CBOD (mg/l) . . : 4.0

NH3-N (mg/l) . . : 1.50

DO (mg/l) . . . : 6.00

R.M.	SEG.LEN	TOTAL TIME	TOTAL CBOD	TOXIC AMMONIA-N	pH	DO	ABOVE
MILES	MILES	HOURS	mg/l	mg/l	mg/l	SU	
5.400	0.000	134.933	0.242	0.071	6.187	9.39	+ <- D.O. SAG
5.300	0.100	136.400	0.236	0.069	6.361	9.41	+
5.200	0.200	137.867	0.231	0.067	6.519	9.44	+
5.100	0.300	139.333	0.225	0.066	6.664	9.47	+
5.000	0.400	140.800	0.220	0.064	6.795	9.50	+
4.900	0.500	142.267	0.215	0.063	6.915	9.53	+
4.800	0.600	143.733	0.210	0.061	7.025	9.56	+
4.700	0.700	145.200	0.205	0.060	7.124	9.59	+
4.630	0.770	146.227	0.200	0.058	7.215	9.63	+

Cal

DIVISION OF WATER POLLUTION CONTROL
STREAM MODELING OUTPUT FILE VERSION 1.04

DATE: 12/14/99 CHECKED BY

COUNTY: Scott

FACILITY: Huntsville STP
STREAM: New River

QUAD: 128NS
BASIN: South Fork Cumberland

** K1=CBOD REMOVAL K2=REAERATION
BACKGROUND CONDITIONS ** K3=NITROGENOUS DEOXYGENATION
** K4=CBOD DECAY K5=SOD

CBOD (mg/l) . . . : 1.5
NH3-N (mg/l) . . . : 0.10
DO (mg/l) . . . : 6.00
TEMP (C) . . . : 25.00
FLOW (cfs) . . . : 0.46

SUMMER RUN

SEGMENT NO. 1 OF 4

SEGMENT NAME: Outfall to rm 9.8
PERMIT NO: TN0020753

K VALUES FOR REMOVAL RATE ARE DEFAULT UNLESS
MARKED WITH () WHICH INDICATES ENTERED BY MODELER

K1= 0.39 K2= 0.58 K3= 0.39 K4= 0.39 TEMP CORRECTED

K1= 0.30 K2= 0.51 K3= 0.30 K4= 0.30 UNCORRECTED

K2 (1/day) AT 20 C : 0.51

SLOPE (ft/mi) OF SEGMENT: 2.84

STREAM VELOCITY (fps) : 0.100

TEMPERATURE USED THIS SEGMENT . . . : 25.00

DISCHARGER FLOWRATE (cfs)/(MGD) . . : 0.464 / 0.3000

PROPOSED STANDARDS

CBOD (mg/l) . . . : 5.0
NH3-N (mg/l) . . . : 1.50
DO (mg/l) . . . : 6.00

R.M.	SEG.LEN	TOTAL TIME	TOXIC CBOD	pH AMMONIA-N	DO ABOVE
MILES	MILES	HOURS	mg/l	mg/l	SU

						Cal
14.600	0.000	0.000	3.258	0.803	6.000	7.98
14.100	0.500	7.333	2.888	0.712	5.497	8.03
13.600	1.000	14.667	2.561	0.631	5.173	8.09
13.100	1.500	22.000	2.270	0.560	4.989	8.14
12.600	2.000	29.333	2.013	0.496	4.912	8.20 <- D.O. SAG
12.100	2.500	36.667	1.784	0.440	4.916	8.26
11.600	3.000	44.000	1.582	0.390	4.980	8.32
11.100	3.500	51.333	1.402	0.346	5.088	8.37
10.600	4.000	58.667	1.243	0.307	5.226	8.43
10.100	4.500	66.000	1.102	0.272	5.385	8.50
9.980	4.620	67.760	0.977	0.241	5.555	8.56

SEGMENT NO. 2 OF 4

SEGMENT NAME: Rm 9.98 to 8.44
 PERMIT NO:

K VALUES FOR REMOVAL RATE ARE DEFAULT UNLESS
 MARKED WITH () WHICH INDICATES ENTERED BY MODELER

K1= 0.39 K2= 1.12 K3= 0.39 K4= 0.39 TEMP CORRECTED

K1= 0.30 K2= 0.99 K3= 0.30 K4= 0.30 UNCORRECTED

K2 (1/day) AT 20 C : 0.99
 SLOPE (ft/mi) OF SEGMENT: 5.51

STREAM VELOCITY (fps) : 0.100
 TEMPERATURE USED THIS SEGMENT. . . : 25.00
 DISCHARGER FLOWRATE (cfs)/(MGD) . . : 0.000 / 0.0000

PROPOSED STANDARDS

CBOD (mg/l) . . . : 5.0
 NH3-N (mg/l) . . . : 1.50
 DO (mg/l) : 6.00

R.M.	SEG.LEN	TOTAL TIME	TOXIC CBOD	pH AMMONIA-N	DO	ABOVE
MILES	MILES	HOURS	mg/l	mg/l	SU	
9.980	0.000	67.760	0.977	0.241	5.555	8.56 <- D.O. SAG
9.880	0.100	69.227	0.954	0.235	5.676	8.57
9.780	0.200	70.693	0.931	0.230	5.791	8.58
9.680	0.300	72.160	0.909	0.224	5.899	8.60
9.580	0.400	73.627	0.888	0.219	6.001	8.61

Cal

9.480	0.500	75.093	0.866	0.214	6.098	8.62
9.380	0.600	76.560	0.846	0.209	6.190	8.63
9.280	0.700	78.027	0.826	0.204	6.277	8.65
9.180	0.800	79.493	0.806	0.199	6.359	8.66
9.080	0.900	80.960	0.787	0.194	6.437	8.67
8.980	1.000	82.427	0.768	0.189	6.511	8.69
8.880	1.100	83.893	0.750	0.185	6.581	8.70
8.780	1.200	85.360	0.732	0.180	6.648	8.71
8.680	1.300	86.827	0.715	0.176	6.711	8.73
8.580	1.400	88.293	0.698	0.172	6.772	8.74
8.480	1.500	89.760	0.681	0.168	6.829	8.76
8.440	1.540	90.347	0.665	0.164	6.883	8.77

SEGMENT NO. 3 OF 4

SEGMENT NAME: Rm 8.44 to RM 5.4
PERMIT NO:

K VALUES FOR REMOVAL RATE ARE DEFAULT UNLESS
MARKED WITH () WHICH INDICATES ENTERED BY MODELER

K1= 0.39 K2= 0.02 K3= 0.39 K4= 0.39 TEMP CORRECTED

K1= 0.30 K2= 0.02 K3= 0.30 K4= 0.30 UNCORRECTED

K2 (1/day) AT 20 C : 0.02
SLOPE (ft/mi) OF SEGMENT: 0.10

STREAM VELOCITY (fps) : 0.100
TEMPERATURE USED THIS SEGMENT. . . : 25.00
DISCHARGER FLOWRATE (cfs)/(MGD) . . : 0.000 / 0.0000

PROPOSED STANDARDS

CBOD (mg/l) . . : 5.0
NH3-N (mg/l) . . : 1.50
DO (mg/l) . . . : 6.00

R.M.	SEG.LEN	TOTAL TIME	TOTAL CBOD	TOXIC AMMONIA-N	pH	DO ABOVE
MILES	MILES	HOURS	mg/l	mg/l	mg/l	SU
8.440	0.000	90.347	0.665	0.164	6.883	8.77
7.940	0.500	97.680	0.589	0.145	6.699	8.84
7.440	1.000	105.013	0.523	0.129	6.537	8.92
6.940	1.500	112.347	0.463	0.114	6.396	8.99

						Cal
6.440	2.000	119.680	0.411	0.101	6.273	9.08 +
5.940	2.500	127.013	0.364	0.090	6.166	9.17 +
5.440	3.000	134.347	0.323	0.080	6.074	9.27 +
5.400	3.040	134.933	0.286	0.071	5.993	9.39 +

SEGMENT NO. 4 OF 4

SEGMENT NAME: 5.24 to 4.63
 PERMIT NO:

K VALUES FOR REMOVAL RATE ARE DEFAULT UNLESS
 MARKED WITH () WHICH INDICATES ENTERED BY MODELER

K1= 0.39 K2= 1.56 K3= 0.39 K4= 0.39 TEMP CORRECTED

K1= 0.30 K2= 1.39 K3= 0.30 K4= 0.30 UNCORRECTED

K2 (1/day) AT 20 C : 1.39
 SLOPE (ft/mi) OF SEGMENT: 7.71

STREAM VELOCITY (fps) : 0.100
 TEMPERATURE USED THIS SEGMENT . . . : 25.00
 DISCHARGER FLOWRATE (cfs)/(MGD) . . : 0.000 / 0.0000

PROPOSED STANDARDS

CBOD (mg/l) . . . : 5.0
 NH3-N (mg/l) . . . : 1.50
 DO (mg/l) . . . : 6.00

R.M.	SEG.LEN	TOTAL TIME	CBOD	TOXIC AMMONIA-N	pH	DO	ABOVE
MILES	MILES	HOURS	mg/l	mg/l	mg/l	SU	
5.400	0.000	134.933	0.286	0.071	5.993	9.39 +	<- D.O. SAG
5.300	0.100	136.400	0.279	0.069	6.184	9.41 +	
5.200	0.200	137.867	0.273	0.067	6.357	9.44 +	
5.100	0.300	139.333	0.266	0.066	6.515	9.47 +	
5.000	0.400	140.800	0.260	0.064	6.658	9.50 +	
4.900	0.500	142.267	0.254	0.063	6.789	9.53 +	
4.800	0.600	143.733	0.248	0.061	6.909	9.56 +	
4.700	0.700	145.200	0.242	0.060	7.018	9.59 +	
4.630	0.770	146.227	0.236	0.058	7.117	9.63 +	

Cal

DIVISION OF WATER POLLUTION CONTROL
STREAM MODELING OUTPUT FILE VERSION 1.04

DATE: 12/14/99 CHECKED BY COUNTY: Scott
FACILITY: Huntsville STP QUAD: 128NS
STREAM: New River BASIN: South Fork Cumberland

 ** K1=CBOD REMOVAL K2=REAERATION
BACKGROUND CONDITIONS ** K3=NITROGENOUS DEOXYGENATION
 ** K4=CBOD DECAY K5=SOD

CBOD (mg/l) . . . : 1.5
NH3-N (mg/l) . . . : 0.10
DO (mg/l) . . . : 6.00
TEMP (C) . . . : 15.00
FLOW (cfs) . . . : 0.46

WINTER RUN

SEGMENT NO. 1 OF 4

SEGMENT NAME: Outfall to rm 9.8
PERMIT NO: TN0020753

K VALUES FOR REMOVAL RATE ARE DEFAULT UNLESS
MARKED WITH () WHICH INDICATES ENTERED BY MODELER

K1= 0.30 K2= 0.45 K3= 0.23 K4= 0.30 TEMP CORRECTED

K1= 0.40 K2= 0.51 K3= 0.30 K4= 0.40 UNCORRECTED

K2 (1/day) AT 20 C : 0.51
SLOPE (ft/mi) OF SEGMENT: 2.84

STREAM VELOCITY (fps) : 0.100
TEMPERATURE USED THIS SEGMENT. . . : 15.00
DISCHARGER FLOWRATE (cfs)/(MGD) . . : 0.464 / 0.3000

PROPOSED STANDARDS

CBOD (mg/l) . . . : 10.0
NH3-N (mg/l) . . . : 1.50
DO (mg/l) . . . : 6.00

R.M.	SEG.LEN	TOTAL TIME	CBOD	TOXIC pH	AMMONIA-N	DO	ABOVE
MILES	MILES	HOURS	mg/l	mg/l	mg/l	SU	

							Cal
14.600	0.000	0.000	5.769	0.803	6.000	8.29	
14.100	0.500	7.333	5.256	0.749	5.593	8.33	
13.600	1.000	14.667	4.789	0.698	5.317	8.36	
13.100	1.500	22.000	4.363	0.651	5.149	8.39	
12.600	2.000	29.333	3.975	0.607	5.068	8.42	
12.100	2.500	36.667	3.622	0.566	5.058	8.46	<- D.O. SAG
11.600	3.000	44.000	3.300	0.528	5.105	8.49	
11.100	3.500	51.333	3.007	0.493	5.195	8.52	
10.600	4.000	58.667	2.739	0.459	5.321	8.55	
10.100	4.500	66.000	2.496	0.428	5.472	8.59	
9.980	4.620	67.760	2.274	0.400	5.642	8.62	

SEGMENT NO. 2 OF 4

SEGMENT NAME: Rm 9.98 to 8.44
 PERMIT NO:

K VALUES FOR REMOVAL RATE ARE DEFAULT UNLESS
 MARKED WITH () WHICH INDICATES ENTERED BY MODELER

K1= 0.23 K2= 0.88 K3= 0.23 K4= 0.23 TEMP CORRECTED

K1= 0.30 K2= 0.99 K3= 0.30 K4= 0.30 UNCORRECTED

K2 (1/day) AT 20 C : 0.99
 SLOPE (ft/mi) OF SEGMENT: 5.51

STREAM VELOCITY (fps) : 0.100
 TEMPERATURE USED THIS SEGMENT. . . : 15.00
 DISCHARGER FLOWRATE (cfs)/(MGD) . . : 0.000 / 0.0000

PROPOSED STANDARDS

CBOD (mg/l) . . . : 10.0
 NH3-N (mg/l) . . . : 1.50
 DO (mg/l) . . . : 6.00

R.M.	SEG.LEN	TOTAL TIME	TOTAL CBOD	TOXIC AMMONIA-N	pH	DO	ABOVE
MILES	MILES	HOURS	mg/l	mg/l	mg/l	SU	
9.980	0.000	67.760	2.274	0.400	5.642	8.62	<- D.O. SAG
9.880	0.100	69.227	2.242	0.394	5.806	8.63	
9.780	0.200	70.693	2.211	0.389	5.962	8.64	
9.680	0.300	72.160	2.181	0.383	6.110	8.64	
9.580	0.400	73.627	2.150	0.378	6.252	8.65	

							Cal
9.480	0.500	75.093	2.121	0.373	6.387	8.66	
9.380	0.600	76.560	2.091	0.367	6.516	8.66	
9.280	0.700	78.027	2.062	0.362	6.639	8.67	
9.180	0.800	79.493	2.034	0.357	6.757	8.68	
9.080	0.900	80.960	2.005	0.352	6.869	8.68	
8.980	1.000	82.427	1.978	0.347	6.977	8.69	
8.880	1.100	83.893	1.950	0.343	7.079	8.70	
8.780	1.200	85.360	1.923	0.338	7.177	8.70	
8.680	1.300	86.827	1.896	0.333	7.271	8.71	
8.580	1.400	88.293	1.870	0.329	7.360	8.72	
8.480	1.500	89.760	1.844	0.324	7.446	8.72	
8.440	1.540	90.347	1.819	0.320	7.528	8.73	

SEGMENT NO. 3 OF 4

SEGMENT NAME: Rm 8.44 to RM 5.4
 PERMIT NO:

K VALUES FOR REMOVAL RATE ARE DEFAULT UNLESS
 MARKED WITH () WHICH INDICATES ENTERED BY MODELER

K1= 0.23 K2= 0.02 K3= 0.23 K4= 0.23 TEMP CORRECTED

K1= 0.30 K2= 0.02 K3= 0.30 K4= 0.30 UNCORRECTED

K2 (1/day) AT 20 C : 0.02
 SLOPE (ft/mi) OF SEGMENT: 0.10

STREAM VELOCITY (fps) : 0.100
 TEMPERATURE USED THIS SEGMENT. . . : 15.00
 DISCHARGER FLOWRATE (cfs)/(MGD) . : 0.000 / 0.0000

PROPOSED STANDARDS

CBOD (mg/l) . . : 10.0
 NH3-N (mg/l) . . : 1.50
 DO (mg/l) . . . : 6.00

R.M.	SEG.LEN	TOTAL TIME	TOTAL CBOD	TOXIC pH AMMONIA-N	DO	ABOVE
MILES	MILES	HOURS	mg/l	mg/l	mg/l	SU
8.440	0.000	90.347	1.819	0.320	7.528	8.73
7.940	0.500	97.680	1.696	0.298	7.264	8.77
7.440	1.000	105.013	1.582	0.278	7.020	8.80
6.940	1.500	112.347	1.475	0.259	6.794	8.84

							Cal
6.440	2.000	119.680	1.375	0.242	6.586	8.87	
5.940	2.500	127.013	1.283	0.225	6.394	8.91	
5.440	3.000	134.347	1.196	0.210	6.217	8.95	
5.400	3.040	134.933	1.116	0.196	6.054	8.99	

SEGMENT NO. 4 OF 4

SEGMENT NAME: 5.24 to 4.63
 PERMIT NO:

K VALUES FOR REMOVAL RATE ARE DEFAULT UNLESS
 MARKED WITH () WHICH INDICATES ENTERED BY MODELER

K1= 0.23 K2= 1.23 K3= 0.23 K4= 0.23 TEMP CORRECTED

K1= 0.30 K2= 1.39 K3= 0.30 K4= 0.30 UNCORRECTED

K2 (1/day) AT 20 C : 1.39
 SLOPE (ft/mi) OF SEGMENT: 7.71

STREAM VELOCITY (fps) : 0.100
 TEMPERATURE USED THIS SEGMENT. . . : 15.00
 DISCHARGER FLOWRATE (cfs)/(MGD) . . : 0.000 / 0.0000

PROPOSED STANDARDS

CBOD (mg/l) . . : 10.0
 NH3-N (mg/l) . . : 1.50
 DO (mg/l) . . . : 6.00

R.M.	SEG.LEN	TOTAL TIME	TOTAL CBOD	TOXIC AMMONIA-N	pH	DO	ABOVE
MILES	MILES	HOURS	mg/l	mg/l	mg/l	SU	
5.400	0.000	134.933	1.116	0.196	6.054	8.99	<- D.O. SAG
5.300	0.100	136.400	1.100	0.193	6.312	8.99	
5.200	0.200	137.867	1.085	0.191	6.553	9.00	+
5.100	0.300	139.333	1.070	0.188	6.776	9.01	+
5.000	0.400	140.800	1.055	0.185	6.984	9.02	+
4.900	0.500	142.267	1.040	0.183	7.177	9.03	+
4.800	0.600	143.733	1.026	0.180	7.357	9.03	+
4.700	0.700	145.200	1.012	0.178	7.524	9.04	+
4.630	0.770	146.227	0.998	0.175	7.679	9.05	+