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Sent: Wednesday, June 30, 2010 3:26 PM
To: Pandya. Vyomini (SDA); Seyfried. Robert (SDA)
Cc: Diana C Messina; James D Marshall; Ken Landau; Lori Okun
Subject: SRCSD - Permit Limits

Bob and Vyomini

Attached is the table with permit options and limits. We can discuss these at tomorrow's meeting.

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Sacramento Regional County Sanitation District - Permit Options

6/30/10

Scenario 1

Scenario 2

Scenario 3

Scenario 4

Constituent	Accept All Mixing Zones		Only Chronic and Human Health Mixing Zones No Acute Mixing Zone		Only Human Health Mixing Zone No Acute or Chronic Mixing Zones		No Mixing Zones End of Pipe Limits		Existing Effluent Quality June 2005 - July 2008	
	AMEL	MDEL	AMEL	MDEL	AMEL	MDEL	AMEL	MDEL	MEC	99.9th Percentile
Copper (total recoverable)	7.7	9.8	8.6	11	7.3	9.3	7.3	9.3	6.3	6.7
Ammonia (mg/L) (as N)	41	51	11	13	1.8	2.2	1.8	2.2	45	36
Cyanide (total recoverable)	21	40	11	22	4.3	8.3	4.3	8.3	10	13
Carbon Tetrachloride	9	17	9	17	9	17	9	17	0.5	0.32
Chlorodibromomethane	12	25	12	25	12	25	12	25	0.7	0.44
Dichlorobromomethane	27	47	27	47	27	47	27	47	2.5	2.6
Methylene Chloride	250	570	250	570	250	570	250	570	5.4	3.6
Tetrachloroethylene	37	75	37	75	37	75	37	75	0.9	0.6
Pentachlorophenol	12	24	12	24	12	24	12	24	5.7	2.4
Bis(2-Ethylhexyl) Phthalate	94	180	94	180	94	180	94	180	8.1	7.2
Dibenzo(ah) anthracene	0.2	0.4	0.2	0.4	0.2	0.4	0.2	0.4	0.51	1.1
1,2-Diphenyl-hydrazine	0.04	0.08	0.04	0.08	0.04	0.08	0.04	0.08	2.8	1.5
N-nitrosodimethylamine	0.00069	0.0014	0.00069	0.0014	0.00069	0.0014	0.00069	0.0014	0.044	3.6
Aluminum	200 ¹	--	200 ¹	--	200 ¹	--	200 ¹	--	35.2	35
Nitrate (mg/L) (as N)	300	--	300	--	300	--	300	--	1.4	0.8
Manganese	2700 ¹	--	2700 ¹	--	2700 ¹	--	2700 ¹	--	82	83
MTBE	260 ¹	--	260 ¹	--	260 ¹	--	260 ¹	--	5.8	2
Mercury (lbs/year)	see notes	see notes	see notes	see notes	see notes	see notes	see notes	see notes	see notes	see notes
Chlorpyrifos ²	0.012	0.025	0.012	0.025	0.012	0.025	0.012	0.025	0.039	0.036
Perchlorate	64	--	64	--	64	--	64	--	600	350

General Notes:

- 1) Acute and chronic aquatic life mixing zones based on SRCSD dynamic model. Acute mixing zone is 60 feet from diffuser and chronic mixing zone 350 feet.
- 2) Harmonic mixing zone is 4 miles downstream of diffuser. At design flow of 181 mgd, the harmonic mean dilution credit is 56.
- 3) 30Q5 dilution = 29 & used for perchlorate & nitrate
- 4) MEC = maximum effluent concentration
- 5) Total mercury limits based on MeHg TMDL, not affected by dilution.
- 6) No assimilative capacity for NDMA; 1,2-diphenyl-hydrazine; aluminum
- 7) 99.9th percentile calculated as the mean plus 3.3 standard deviations (assumes normal distribution); 1/2 MDL used for non-detect
- 8) AMEL = Average monthly effluent limit & MDEL = Maximum daily effluent limit

Footnotes:

- 1 - annual average effluent limit
- 2 - Dynamic model not run for chlorpyrifos, so no dilution