

Appendix 11-1a. Non-ECP Water Quality Sampling Sites and Monitoring Schedule

Table A11-1a.1. Water Quality Monitoring Schedule for Non-ECP Discharge Structures and Additional Upstream Monitoring Locations.

AREA	Non-ECP PERMIT STRUCTURE	WATER QUALITY SAMPLING SITE	CURRENT WATER QUALITY MONITORING SCHEDULE							WATER QUALITY COMMENTS
			Physical	Nutrients	Major Ions	Trace Metals	Pesticides Water	Pesticides Sediment	Priority Pollutants	
INTO	ACME1DS	ACME1DS	BWF/M	BWF/M	QTR	SA	QTR	SA	1 WS - 1 DS	
	ACME1 + (Upstream of ACME1DS)	L40-1		autosampler pending						ACME1 is not listed in the permit, but is an upstream structure influencing the ACME1DS culvert
	G-94D	G94D	BWF/M	BWF/M	QTR	SA	QTR	SA	1 WS - 1 DS	
	ACME2 + (Upstream of G94D)	L40-2		autosampler pending						ACME1 is not listed in the permit, but is an upstream structure influencing the G94D culvert
	G-123	G123	BWF/M	BWF/M	QTR	SA	QTR	SA	1 WS - 1 DS	
	S-9	S9	BWF/M	Weekly Flowing (autosampler)	QTR	SA	QTR	SA	1 WS - 1 DS	
	S-14	S14	BWF	BWF	QTRF	SAF				Sampled only during Flow
	S-18C	S18C	BWF/M	BWF/M	QTR	SA	QTR	SA	1 WS - 1 DS	
	S-140	S140	BWF/M	BWF/M	QTR	SA	QTR	SA		
	S-175	S175	BWF/M	BWF/M	QTR	SA				
	S-190	S190	BWF/M	BWF/M	QTR	SA	QTR	SA		
	S-332	S332	BWF/M	BWF/M	QTR	SA	QTR	SA		
WITHIN	NSID (S38B)	S38B	BWF	BWF	QTRF	SAF	QTRF	SAF	1 WS - 1 DS	Sampled only during Flow
	G-64	G64	BWF	BWF	QTRF	SAF				Sampled only during Flow
	G-69	G69	BWF	BWF	QTRF	SAF				Sampled only during Flow
	G-71, S-346, S-347	S12D	BWF/M	BWF/M	QTR	SA				
	S-10E	S10E	BWF/M	BWF/M	QTR	SA				
	S-141	S34	BWF/M	BWF/M	QTR	SA				
	S-142	S142	BWF/M	BWF/M	QTR	SA	QTRF	SAF	1 WS - 1 DS	
	S-143	S11A	BWF/M	BWF/M	QTR	SA				
	S-144	S144	BWF/M	BWF/M	QTR	SA				
	S-145	S145	BWF/M	BWF/M	QTR	SA				
	S-146	S146	BWF/M	BWF/M	QTR	SA				
	S-151	S151	BWF/M	BWF/M	QTR	SA				
FROM	S-333	S333	BWF/M	BWF/M	QTR	SA				
	S-339, S-340	C123SR84	BWF/M	BWF/M	QTR	SA				
	G-94A, G-94B, G-94C	G94B	BWF/M	BWF/M	QTR	SA				
	S-31	S31	BWF/M	BWF/M	QTR	SA	QTR	SA		
	S-34	S34	BWF/M	BWF/M	QTR	SA				
	S-38	S38	BWF/M	BWF/M	QTR	SA				
	S-39	S39	BWF/M	BWF/M	QTR	SA				
	S-197	S197	BWF	BWF	QTRF	SAF				Sampled only during Flow
C-111 BASIN	S-334	S334	BWF/M	BWF/M	QTR	SA				
	S-337	S31	BWF/M	BWF/M	QTR	SA				
	S-343A, S-343B	US41-25	BWF/M	BWF/M	QTR	SA				
	S-344	S344	QTR	QTR	QTR	SA				
	S-174 +	S176	BWF/M	BWF/M	QTR	SA	QTR	SA	1 WS - 1 DS	
	S-177 +	S177	BWF/M	BWF/M	QTR	SA	QTR	SA	1 WS - 1 DS	
	S-178 +	S178	BWF/M	BWF/M	QTR	SA	QTR	SA	1 WS - 1 DS	
	S-331 +, S-173 +	S331-173	BWF/M	BWF/M	QTR	SA				S173 is not listed in Permit, but is adjacent to and flows in same direction as S331
		S331					QTR	SA	1 WS - 1 DS	Sampling Site is designated S331 for Pesticides and Priority pollutants

Note: 1) Water quality sample site is located on upstream side of permitted structure, unless otherwise noted with different representative sampling location
 2) Structure names with a "+" are upstream of Non-ECP INTO structures and are additional monitoring locations
 3) Table Legend:

BWF/M = Biweekly if Flowing/Otherwise Monthly

SA = Semiannually

BWF = Biweekly if Flowing

SAF = Semiannually if Flowing

QTR = Quarterly

1 WS - 1 DS = 1 Wet Season and 1 Dry Season

QTRF = Quarterly if Flowing

Table A11-1a.2. Flow volume and annual flow weighted mean TP concentrations for Non-ECP structures during WY2000 (May 1, 1999 through April 30, 2000).

AREA	NON ECP PERMIT STRUCTURE	WATER QUALITY SAMPLING SITE	FLOW		Monthly Flow Volumes (acre-ft) (May 1, 1999 - April 30, 2000)												Total Flow Volume (acre-ft)	Annual Flow Weighted Mean TP (ppb)
			STATION	DBKEY	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr		
INTO	ACME1DS	ACME1DS	n/a	n/a	See flow data from ACME 1												n/a	130
	ACME1 + (Upstream of ACME1DS)	L40-1	ACME1	15022	29	5,232	1,418	1,970	2,284	5,776	1,125	376	176	0	247	586	19,220	
	G-94D	G94D	n/a	n/a	See flow data from ACME 2												n/a	122
	ACME2 + (Upstream of G94D)	L40-2	ACME2	15023	32	5,869	1,480	1,669	2,375	5,938	670	183	189	0	298	1,088	19,790	
	G-123	G123_P	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1,303	17
	S-9	S9_P	15015	8,652	51,701	28,676	30,692	38,678	67,961	25,430	3,186	79	514	6,190	9,278	271,038	25	
	S-14	S14_C	n/a	0	0	0	0	0	0	0	0	0	0	0	0	0	NPF	
	S-18C	S18C_S	15760	488	15,184	17,100	17,840	25,385	52,955	15,451	11,883	15,612	9,848	5,691	7,468	194,905	9	
	S-140	S140_TOT	06754	0	20,621	24,807	14,801	33,966	57,886	20,109	3,687	0	40	-448	2,831	178,299	67	
	S-175	S175_C	15752	1	10,683	8,356	3,402	9,049	18,153	17,011	11,345	12,759	6,761	17	0	97,536	8	
WITHIN	S-190	S190_S	15987	2	5,827	9,473	10,004	32,389	33,856	5,477	556	0	0	2	0	97,585	111	
	S-332	S332_P	15753	442	9,475	6,412	21,557	10,475	32,805	31,644	32,837	33,001	19,735	1,565	1,927	201,876	8	
	NSID (S38B)	S38B_NSPRNG_C2	15121	0	1,632	902	1,823	1,547	3,268	175	0	0	0	276	258	9,881	36	
	G-64	G64_C	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	G-69	G69_C	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	G-71, S-346, S-347	S12D	S12D_S	FE774	0	7,432	30,847	31,930	37,794	80,550	111,969	61,284	43,746	10,832	0	0	416,384	10
	S-10E	S10E_C	16228	0	0	0	0	0	0	0	0	0	0	0	0	0	NPF	
	S-141	S34_C	S141_W	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	S-142	S142_C	F9554	4,968	3,070	12,002	7,420	9,153	12,969	15,873	12,265	0	1,731	-434	-256	78,760	19	
	S-143	S11A_C	S143_C	JM599	0	0	0	0	0	0	0	0	0	0	0	10,853	5,597	16,450
	S-144	S144_C	15751	0	3,803	3,958	2,793	0	0	0	4,125	5,755	6,062	1,747	4,395	32,639	17	
OUT	S-145	S145_C	15605	1,529	6,268	5,267	3,931	0	0	0	4,406	6,288	6,758	0	1,097	35,544	13	
	S-146	S146_C	15608	0	4,058	3,880	2,503	0	0	0	4,306	5,620	5,416	0	913	26,697	10	
	S-151	S151_C	15550	11,558	4,440	16,969	5,004	0	0	0	813	51,201	51,858	15,501	35,729	193,074	25	
	S-333	S333_S	15042	3,109	2,838	5,960	1,441	0	248	690	0	34,319	66,852	22,535	31,348	169,341	10	
	S-339	C123SR84	S339_S	15563	41,132	11,064	0	0	4,269	35,617	16,944	30,467	10,631	0	0	4,863	154,987	45
	S-340	C123SR84	S340_S	15666	34,774	9,836	782	646	2,278	20,331	34,608	32,240	11,064	1,564	1,931	7,146	157,199	42

Note: 1) Water quality sample site is located on upstream side of permitted structure, unless otherwise noted with different sampling location

2) n/a indicates that flow and/or stage data is Not Available, or that structure is not appropriately instrumented to capture information.

3) Structure names with a "+" are upstream of Non-ECP INTO structures and are additional monitoring locations

4) ACME1DS and G-94D are not instrumented for flow calculation. Flow-weighted mean TP concentration was determined by considering the TP data from these sites with the flow data from the upstream pump stations (ACME 1 and ACME 2, respectively)

5) G-123 structure is not monitored for flow (reported volume is an estimate), Arithmetic Mean TP was calculated by considering all samples collected.

6) S-14 is not instrumented for flow calculation, However operational records indicate no operation during the second year of permit monitoring (WY99)

7) NPF indicates either structure closed or that no positive flow was recorded on sampling days, thus a flow-weighted mean could not be calculated

Table A11-1a.2. (Continued) Flow volume and annual flow weighted mean TP concentrations for Non-ECP structures during WY2000 (May 1, 1999 through April 30, 2000).

AREA	NON ECP PERMIT STRUCTURE	WATER QUALITY SAMPLING SITE	FLOW		Monthly Flow Volumes (acre-ft) (May 1, 1999 - April 30, 2000)												Total Flow Volume (acre-ft)	Annual Flow Weighted Mean TP (ppb)
			STATION	DBKEY	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr		
FROM	G-94A	G94B	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	G-94B	G94B	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	G-94C	G94B	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	S-31	S31_C	06786	0	0	0	0	0	0	0	206	25,438	34,878	30,160	2,337	6,973	99,993	12.7
	S-34	S34_C	15954	3,199	1,353	6,914	3,052	6,523	4,904	12,895	14,831	14,675	13,187	8,061	10,613	100,206	16.4	
	S-38	S38_C	06760	10,280	1,787	12,956	6,500	8,274	7,333	13,184	14,485	14,028	12,610	10,828	10,487	122,752	11.7	
	S-39	S39_S	06733	4,474	3,437	23,864	231	16,812	17,421	36,325	47,236	23,459	2,116	10,324	20,241	205,940	48.9	
	S-197	S197_C	13092	0	0	0	0	4,452	37,410	0	0	0	0	0	0	0	41,862	9.7
	S-334	S334_S	DJ186	2,826	0	0	1	0	0	0	482	21,920	22,188	0	4,289	51,706	9.4	
	S-337	S337_C	06896	10,935	0	0	0	0	0	0	371	1,033	0	7,634	15,274	35,246	9.0	
	S-343A	US41-25	S343A_C	16193	0	1,042	3,459	4,077	4,051	5,213	6,053	3,275	0	0	0	0	27,170	11.5
	S-343B	US41-25	S343B_C	16196	0	1,221	4,326	4,464	4,692	5,967	6,495	3,456	0	0	0	0	30,622	11.4
	S-344	S344_C	16199	0	602	2,257	3,126	3,188	3,751	4,205	2,331	0	0	0	0	0	19,458	15.6
C-111 BASIN	S-174 +	S176	S174_S	12289	1,115	9,313	6,999	9,684	2,736	6,108	14,973	19,841	3,239	1,077	6,569	3,729	85,382	8.2
	S-177 +	S177_S	13156	3,410	12,649	7,154	11,157	24,981	38,035	8,376	9,718	18,751	7,373	2,566	5,141	149,312	17.7	
	S-178 +	S178_C	03952	0	0	0	0	-2,452	-2,005	-515	0	0	0	0	0	-4,972	NPF	
	S-331 +	S331-173	S331_P	15722	10	6,035	9,442	10,895	15,202	14,644	39,433	51,472	60,557	32,078	0	4,536	244,306	
	S-173 +	S331-173	S173_C	15830	5,214	2,408	925	1,358	1,449	2,723	0	0	0	1,639	5,679	5,628	27,023	8.5

Note: 1) Water quality sample site is located on upstream side of permitted structure, unless otherwise noted with different sampling location

2) n/a indicates that flow and/or stage data is Not Available, or that structure is not appropriately instrumented to capture information.

3) Structure names with a "+" are upstream of Non-ECP INTO structures and are additional monitoring locations

4) G-94A, G-94B, G-94C are not instrumented for flow calculations

5) S-331 and S-173 flow records were combined to determine the annual flow weighted mean TP

6) NPF indicates either structure closed or that no positive flow was recorded on sampling days, thus a flow-weighted mean could not be calculated