

Table 4.15. NPDES compliance monitoring requirements and record for the Y-12 Plant, January through June, 1995

Discharge point	Effluent parameter	Effluent limits				Percentage of compliance	No. of samples
		Daily av (kg/d)	Daily max (kg/d)	Daily av (mg/L)	Daily max (mg/L)		
301 (Kerr Hollow Quarry)	Lithium				5.0	100	12
	pH, standard units			<i>a</i>	8.5	100	12
	Total suspended solids			30.0	50.0	100	12
	Temperature, °C				30.5	100	12
	Zirconium				3.0	100	12
302 (Rogers Quarry)	Oil and grease			10.0	15.0	100	26
	pH, standard units			<i>a</i>	8.5	100	26
	Settleable solids, mL/L				0.5	100	26
	Total suspended solids			30.0	50.0 ^b	100	26
	Temperature, °C				30.5	100	26
304 (Bear Creek)	Oil and grease			10.0	15.0	100	26
	pH, standard units			<i>a</i>	8.5	100	26
307 (West Borrow Area) ^c	Temperature, °C					100	2
	pH, standard units					100	2
	Oil and grease					100	2
	Total suspended solids					100	2
308 (East Borrow Area) ^c	Temperature, °C					100	2
	pH, standard units					100	2
	Oil and grease					100	2
	Total suspended solids					100	2
501 [Central Pollution Control Facility (CPCF-I)]	Cadmium, total	0.07	0.19	0.26	0.69	100	16
	Chromium, total	0.5	0.75	1.71	2.77	100	16
	Copper, total	0.6	0.9	2.07	3.38	100	16
	Cyanide, total	0.2	0.33	0.65	1.20	100	16
	Lead, total	0.12	0.19	0.43	0.69	100	16
	Nickel, total	0.65	1.1	2.38	3.98	100	16
	Oil and grease	7.1	14.2	26.0	52.0	100	16
	pH, standard units			<i>a</i>	9.0	100	16
	Silver, total	0.07	0.12	0.24	0.43	100	16
	Temperature, °C				30.5	100	16
	Total suspended solids	8.5	16.4	31.0	60.0	100	16
	Total toxic organics		0.6		2.13	100	16
	Zinc, total	0.4	0.7	1.48	2.61	100	16
502 [West End Treatment Facility (WETF)]	Cadmium, total	0.07	0.019	0.26	0.69	<i>d</i>	0
	Chromium, total	0.5	0.75	1.71	2.77	<i>d</i>	0
	Copper, total	0.6	0.92	2.07	3.38	<i>d</i>	0
	Cyanide, total	0.2	0.33	0.65	1.20	<i>d</i>	0
	Lead, total	0.12	0.19	0.43	0.69	<i>d</i>	0

Table 4.15 (continued)

Discharge point	Effluent parameter	Effluent limits				Percentage of compliance	No. of samples
		Daily av (kg/d)	Daily max (kg/d)	Daily av (mg/L)	Daily max (mg/L)		
	Nickel, total	0.65	1.10	2.38	3.98	<i>d</i>	0
	Oil and grease	7.1	14.2	26.0	52.0	<i>d</i>	0
	pH, standard units			<i>a</i>	9.0	<i>d</i>	0
	Silver, total	0.07	0.12	0.24	0.43	<i>d</i>	0
	Temperature, °C				30.5	<i>d</i>	0
	Total suspended solids	8.5	16.4	31.0	60.0	<i>d</i>	0
	Total toxic organics		0.6		2.13	<i>d</i>	0
	Zinc, total	0.4	0.7	1.48	2.61	<i>d</i>	0
503 (Steam Plant Wastewater Treatment Facility)	Chromium, total	0.38	0.38	0.20	0.20	<i>d</i>	0
	Copper, total	1.89	1.89	1.0	1.0	<i>d</i>	0
	Iron, total	1.89	1.89	1.0	1.0	<i>d</i>	0
	Zinc, total	1.89	1.89	1.0	1.0	<i>d</i>	0
	Oil and grease	28.4	37.9	15.0	20.0	<i>d</i>	0
	Total suspended solids	57.0	189.0	30.0	100.0	<i>d</i>	0
	Temperature, °C				30.5	<i>d</i>	0
	pH, standard units			<i>a</i>	9.0	<i>d</i>	0
Category I outfalls (precipitation runoff and small amounts of groundwater)	pH, standard units			<i>a</i>	8.5	100	56
Category II outfalls (cooling waters, condensate, precipitation runoff, and building, roof, and foundation drains)	pH, standard units			<i>a</i>	8.5	100	39
	Temperature, °C ^e						100
Category III outfalls (process wastewaters)	pH, standard units			<i>a</i>	8.5	100	30
Category IV outfalls (untreated process wastewaters)	pH, standard units			<i>a</i>	8.5	100	35
504 (Plating Rinsewater Treatment Facility)	Cadmium, total	0.07	0.019	0.26	0.69	100	4
	Chromium, total	0.50	0.75	1.71	2.77	100	4
	Copper, total	0.60	0.92	2.07	3.38	100	4
	Cyanide, total	0.2	0.33	0.65	1.20	100	4
	Lead, total	0.12	0.19	0.43	0.69	100	4
	Nickel, total	0.65	1.10	2.38	3.98	100	4
	Oil and grease	7.1	14.2	26.0	52.0	100	4
	pH, standard units			<i>a</i>	9.0	100	4

Oak Ridge Reservation Annual Site Environmental Report for 1995

Table 4.15 (continued)

Discharge point	Effluent parameter	Effluent limits				Percentage of compliance	No. of samples
		Daily av (kg/d)	Daily max (kg/d)	Daily av (mg/L)	Daily max (mg/L)		
	Silver, total	0.07	0.12	0.24	0.43	100	4
	Temperature, °C				30.5	100	4
	Total suspended solids	8.5	16.4	31.0	60.0	100	4
	Total toxic organics		0.6		2.13	100	4
	Zinc, total	0.4	0.7	1.48	2.61	100	4
501/504 (combined discharge from Central Pollution Control Facility and Plating Rinsewater Treatment Facility)	Cadmium, total	0.07	0.019	0.26	0.69	<i>d</i>	
	Chromium, total	0.50	0.75	1.71	2.77	<i>d</i>	
	Copper, total	0.60	0.92	2.07	3.38	<i>d</i>	
	Cyanide, total	0.2	0.33	0.65	1.20	<i>d</i>	
	Lead, total	0.12	0.19	0.43	0.69	<i>d</i>	
	Nickel, total	0.65	1.10	2.38	3.98	<i>d</i>	
	Oil and grease	7.1	14.2	26.0	52.0	<i>d</i>	
	pH, standard units			<i>a</i>	9.0	<i>d</i>	
	Silver, total	0.07	0.12	0.24	0.43	<i>d</i>	
	Temperature, °C				30.5	<i>d</i>	
	Total suspended solids	8.5	16.4	31.0	60.0	<i>d</i>	
	Total toxic organics		0.6		2.13	<i>d</i>	
	Zinc, total	0.4	0.7	1.48	2.61	<i>d</i>	
623 (Steam Plant fly ash sluice water)	pH, standard units			<i>a</i>	8.5	<i>d</i>	
506 (9204-3 sump pump oil)	Temperature, °C				30.5	<i>d</i>	
	Oil and grease			10.0	15.0	<i>d</i>	
	pH, standard units			<i>a</i>	8.5	<i>d</i>	
508 (Experimental Mobile Wastewater Treatment Facility)	Mercury, total			0.002	0.004	<i>d</i>	<i>a</i>
	pH, standard units			<i>a</i>	9.0	<i>d</i>	
	Total suspended solids			30.0	45.0	<i>d</i>	
510 (Waste Coolant Processing Facility)	Biochemical oxygen demand	1.33	2.65			<i>d</i>	
	Oil and grease			15.0	20.0	<i>d</i>	
	pH, standard units			<i>a</i>	9.0	<i>d</i>	
	Temperature, °C				30.5	<i>d</i>	
	Total suspended solids			30.0	50.0	<i>d</i>	
512 (Groundwater Treatment Facility)	Oil and grease			<i>a</i>	15	100	296
	Iron, total			<i>a</i>	1.0	100	296
	pH, standard units			<i>a</i>	9.0	100	continuous
	PCBs					100	296

Table 4.15 (continued)

Discharge point	Effluent parameter	Effluent limits				Percentage of compliance	No. of samples
		Daily av (kg/d)	Daily max (kg/d)	Daily av (mg/L)	Daily max (mg/L)		
Miscellaneous discharges (cooling tower blowdown)	Free available chlorine			0.2	0.5	100	21
	pH, standard units			<i>a</i>	8.5	100	21
	Temperature, °C			35	38	100	21
Miscellaneous discharges (demineralizers)	pH, standard units			<i>a</i>	8.5	<i>d</i>	
	Total suspended solids			30	50	<i>d</i>	

^aNot applicable.

^bLimit not applicable during periods of increased surface runoff resulting from precipitation.

^cApplication submitted to add this outfall to the permit. No limits have been set.

^dNo discharge.

^eTemperature shall be controlled such that the stream temperature standards delineated in the General Water Quality Criteria for the Definition and Control of Pollution in the Waters of Tennessee, as amended, are not violated as a result of this discharge.