

US EPA ARCHIVE DOCUMENT

Table 1a

Dioxin Analytical Results in Soil
Validated Results (Sampled from 6/21/99 - 11/5/99)

Page: 1B of 10

Date: 02/24/00

EPA Centredale Manor Apartments
Centredale, RI

CONSTITUENT	(Units in ng/kg)	SITE	AD-03	AD-03	AD-04	AD-04	AD-04	AD-04
		SAMPLE ID	AD-03-A	AD-03-C	AD-04-A	AD01-FD	AD-04-A-QC	AD-04-B
		DATE	07/20/99	07/20/99	07/19/99	07/19/99	07/19/99	07/19/99
		DEPTH (ft)	0.50	6.50	0.50	0.50	0.50	2.50
		RESULT TYPE	Primary	Primary	Primary	Duplicate 1	Duplicate 2	Primary
2,3,7,8-TCDD			14	<0.40 U	26000 J	93000 J	34200 J	570
1,2,3,7,8-PeDD			<0.53 U	<0.27 U	31 J	81 J	44	<0.86 U
1,2,3,4,7,8-HxDD			<0.48 U	<0.41 U	33 J	100 J	33.3	<1.1 U
1,2,3,6,7,8-HxDD			<0.50 U	<0.42 U	100 J	200 J	91.1	3.6 J
1,2,3,7,8,9-HxDD			<0.46 U	<0.39 U	95 J	230 J	79	3.1 J
1,2,3,4,6,7,8-HpDD			3.8 J	<1.3 U	1800 J	5600 J	2450	54
OCDD			87	96	13000 J	38000 J	14900 J	370
2,3,7,8-TCDF			<0.50 U	<0.21 U	52 J	110 J	72.3	2.4
1,2,3,7,8-PeDF			<0.39 U	<0.32 U	20	26	14.1	<1.1 U
2,3,4,7,8-PeDF			<0.38 U	<0.31 U	38 J	69 J	84.5	<1.4 U
1,2,3,4,7,8-HxDF			<0.44 U	<0.051 U	90	84	47.1	3.9 J
1,2,3,6,7,8-HxDF			---	---	78 J	70 J	39.3	3.5 J
2,3,4,6,7,8-HxDF			<0.14 U	<0.052 U	37	36	51.4	<1.6 U
1,2,3,7,8,9-HxDF			<0.10 U	<0.055 U	<2.7 U	<4.8 U	12.8	<0.21 U
1,2,3,4,6,7,8-HpDF			3.0 J	<0.18 U	760 J	670	364	28
1,2,3,4,7,8,9-HpDF			<0.18 U	<0.21 U	32	43	22.4	<1.6 U
OCDF			<2.9 U	<1.4 U	800	980	580	35
Total TCDDs			15	<0.40 U	27000	96000	35100	580
Total PeCDDs			<0.53 U	<0.27 U	170	480	285	<2.1 U
Total HxCDDs			<0.67 U	<0.42 U	780	1900	714	22
Total HpCDDs			7.7	<1.7 U	3300	9400	4210	99
Total TCDFs			0.73	<0.21 U	1500	3000	2180 J	37
Total PeCDFs			<1.3 U	<0.32 U	1500	1900	1470 J	49
Total HxCDFs			<1.5 U	<0.055 U	1500	1900	1020	50
Total HpCDFs			3.0	<0.21 U	1500	1500	793	49

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

Table 1a

Dioxin Analytical Results in Soil
Validated Results (Sampled from 6/21/99 - 11/5/99)

Page: 1C of 10

Date: 02/24/00

EPA Centredale Manor Apartments
Centredale, RI

CONSTITUENT	(Units in ng/kg)	SITE	AD-04	AD-05	CMS-460	CMS-461	CMS-462	CMS-463
		SAMPLE ID	AD-04-C	AD-05-A	CMS-460-A	CMS-461-A	CMS-462-A	CMS-463-A
		DATE	07/19/99	07/20/99	07/27/99	07/27/99	07/27/99	07/27/99
		DEPTH (ft)	9.50	0.50	0.50	0.50	0.50	0.50
		RESULT TYPE	Primary	Primary	Primary	Primary	Primary	Primary
2,3,7,8-TCDD			6.5	2800	4.49	24.4	10.5	16.0
1,2,3,7,8-PeDD			<0.28 U	<1.7 U	<0.428 UJ	<0.866 UJ	<3.26 UJ	<1.02 UJ
1,2,3,4,7,8-HxCDD			<0.30 U	<3.8 U	0.201	0.710	1.16	0.752
1,2,3,6,7,8-HxCDD			<0.31 U	9.0	<0.601 UJ	<1.82 UJ	<4.43 UJ	<3.14 UJ
1,2,3,7,8,9-HxCDD			<0.29 U	7.8 J	<0.417 UJ	<1.56 UJ	<2.78 UJ	<1.96 UJ
1,2,3,4,6,7,8-HpDD			<0.60 U	140	5.80	19.2	32.5	44.2
OCDD			<3.8 U	860	118	118	183 J	280
2,3,7,8-TCDF			<0.24 U	8.2	1.61	5.31	8.82	3.40
1,2,3,7,8-PeDF			<0.18 U	<2.7 U	0.638	2.23	3.98	1.55
2,3,4,7,8-PeDF			<0.18 U	4.1 J	1.56	8.31 J	33.9 J	12.0
1,2,3,4,7,8-HxCDF			<0.23 U	9.0	0.752	2.88	5.77	2.62
1,2,3,6,7,8-HxCDF			---	5.2 J	0.601	2.47	7.25	3.32
2,3,4,6,7,8-HxCDF			<0.23 U	<2.5 U	0.919	4.26	16.3	6.57
1,2,3,7,8,9-HxCDF			<0.24 U	<0.32 U	0.177	0.809 J	2.26	0.908
1,2,3,4,6,7,8-HpDF			<0.36 U	80	2.97	16.1	19.1	15.2
1,2,3,4,7,8,9-HpDF			<0.094 U	<4.0 U	0.240	0.971	1.81	0.882
OCDF			<0.42 U	120	3.50	16.9	19.0	18.1
Total TCDDs			6.5	2900	10.5 J	(37.0) J	(30.7) J	(26.9) J
Total PeCDDs			<0.28 U	11	<5.06 UJ	<13.6 UJ	<25.4 UJ	<15.7 UJ
Total HxCDDs			<0.31 U	71	<6.00 UJ	<9.21 UJ	<41.5 UJ	<30.5 UJ
Total HpCDDs			<0.60 U	250	11.7 J	37.1 J	60.2 J	79.5 J
Total TCDFs			<0.24 U	140	24.7 J	(88.6) J	289 J	(92.7) J
Total PeCDFs			<0.35 U	150	<16.9 UJ	(87.9) J	422 J	155 J
Total HxCDFs			<0.24 U	110	<11.5 UJ	50.7 J	186 J	83.0 J
Total HpCDFs			<0.36 U	160	4.48 J	(26.2) J	38.2 J	29.8 J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

(I) = Less than Reporting Limit

For RCL 8290_P

Table 1a

Dioxin Analytical Results in Soil
Validated Results (Sampled from 6/21/99 - 11/5/99)

Page: 1D of 10

Date: 02/24/00

EPA Centredale Manor Apartments
Centredale, RI

CONSTITUENT	(Units in ng/kg)	SITE	CMS-463	CMS-464	CMS-464	CMS-465	CMS-466	CMS-467
		SAMPLE ID	CMS-463-A-QC	CMS-464-A	HA12-FD	CMS-465-A	CMS-466-A	CMS-467-A
		DATE	07/27/99	07/27/99	07/27/99	07/27/99	07/27/99	07/27/99
		DEPTH (ft)	0.50	0.50	0.50	0.50	0.50	0.50
		RESULT TYPE	Duplicate 1	Primary	Duplicate 1	Primary	Primary	Primary
2,3,7,8-TCDD			15	1.62	2.61	135	74.3	2680 J
1,2,3,7,8-PeDD			<0.97 UJ	<1.49 UJ	<1.58 UJ	<0.602 UJ	<3.04 UJ	49.4
1,2,3,4,7,8-HxDD			<0.42 U	0.486	0.936	0.990	3.09	10.5
1,2,3,6,7,8-HxDD			<2.1 U	<2.51 UJ	<3.56 UJ	<2.64 UJ	<6.74 UJ	75.5
1,2,3,7,8,9-HxDD			<1.7 U	<1.31 UJ	<1.68 UJ	<2.21 UJ	5.47	50.2
1,2,3,4,6,7,8-HpDD			24	11.1	13.3	58.8	79.2	434
OCDD			140	91.9	104	449	414	2170
2,3,7,8-TCDF			2.6	1.21	1.35	1.55	8.97	21.3
1,2,3,7,8-PeDF			<1.6 U	0.714	0.826	0.557	7.52	3.05
2,3,4,7,8-PeDF			<2.6 U	17.6	19.2	1.57	17.3	17.1
1,2,3,4,7,8-HxDF			3.5	2.28	2.77	1.01	14.8	9.15
1,2,3,6,7,8-HxDF			3.3 J	2.85	3.45	0.968	12.2	7.91
2,3,4,6,7,8-HxDF			4.1	7.70	9.10	1.25	20.6	11.2
1,2,3,7,8,9-HxDF			<0.38 U	1.45	1.46	0.366	3.35	2.21
1,2,3,4,6,7,8-HpDF			12	5.93	6.69	12.3	62.4	80.6
1,2,3,4,7,8,9-HpDF			<0.81 U	0.780	0.963	0.897	4.42	3.76
OCDF			11 J	7.25	8.51	46.5	38.8	89.0
Total TCDDs			25 J	(12.0) J	<6.74 UJ	138 J	(98.3) J	2770 J
Total PeCDDs			<2.5 UJ	<21.6 UJ	<17.5 UJ	<4.55 UJ	<37.4 UJ	357 J
Total HxCDDs			11 J	<31.3 UJ	<34.0 UJ	<20.1 UJ	<70.8 UJ	608 J
Total HpCDDs			43 J	23.4 J	27.4 J	112 J	162 J	772 J
Total TCDFs			88 J	(56.6) J	(63.0) J	(26.1) J	(239) J	329 J
Total PeCDFs			140 J	(143) J	166 J	<18.7 UJ	189 J	428 J
Total HxCDFs			67 J	(90.9) J	106 J	(20.9) J	154 J	230 J
Total HpCDFs			22 J	13.6 J	15.5 J	(31.1) J	(95.6) J	156 J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

() = Less than Reporting Limit

For RCL 8290

Table 1a

Dioxin Analytical Results in Soil
Validated Results (Sampled from 6/21/99 - 11/5/99)

Page: 1E of 10

Date: 02/24/00

EPA Centredale Manor Apartments
Centredale, RI

CONSTITUENT	(Units in ng/kg)	SITE	CMS-468	CMS-469	CMS-470	CMS-470	CMS-471	CMS-471
		SAMPLE ID	CMS-468-A	CMS-469-A	CMS-470-A	CMS-470-B	CMS-471-A	CMS-471-B
		DATE	07/27/99	07/27/99	07/27/99	07/27/99	07/27/99	07/27/99
		DEPTH (ft)	0.50	0.50	0.50	1.50	0.50	1.50
		RESULT TYPE	Primary	Primary	Primary	Primary	Primary	Primary
2,3,7,8-TCDD			6.95	5.81	27500 J	13200 J	2120 J	4020 J
1,2,3,7,8-PeDD			<1.07 UJ	<0.731 UJ	187	253	6.23	12.2
1,2,3,4,7,8-HxCDD			1.15	0.486	84.5	58.4	7.32	10.7
1,2,3,6,7,8-HxCDD			<2.91 UJ	<1.55 UJ	212	845	19.9	29.4
1,2,3,7,8,9-HxCDD			<2.21 UJ	<1.11 UJ	202	409	14.9	21.7
1,2,3,4,6,7,8-HpDD			42.9	11.3	3270 J	2050	314	469
OCDD			1190	70.2	15000 J	9530 J	1860	2710
2,3,7,8-TCDF			3.42	5.66	184	115	17.9	27.6
1,2,3,7,8-PeDF			1.75	1.70	17.7	22.2	6.87	13.7
2,3,4,7,8-PeDF			7.94	4.12	111	117	30.3	44.3
1,2,3,4,7,8-HxCDF			2.92	1.91	64.0	88.5	21.8	37.5
1,2,3,6,7,8-HxCDF			2.70	1.57	44.3	64.4	20.8	39.0
2,3,4,6,7,8-HxCDF			5.33	2.24	59.1	83.6	22.8	34.4
1,2,3,7,8,9-HxCDF			0.695	0.404	25.9 J	38.1	6.55	10.6
1,2,3,4,6,7,8-HpDF			20.3	6.85	508	868	188	282
1,2,3,4,7,8,9-HpDF			1.31	0.595	58.8	78.2	14.3	24.3
OCDF			31.3	8.34	734	1040	267	415
Total TCDDs			(17) J	(17.3) J	(28700) J	13900 J	2180 J	4140 J
Total PeCDDs			<12.5 UJ	<13.6 UJ	(1020) J	2040 J	(52.6) J	101 J
Total HxCDDs			<29.2 UJ	<13.7 UJ	(1650) J	5950 J	178 J	(260) J
Total HpCDDs			86.6 J	25.0 J	5630 J	3700 J	598 J	882 J
Total TCDFs			(67.2) J	(47.5) J	(3260) J	(2710) J	(371) J	(597) J
Total PeCDFs			(80.4) J	44.3 J	3180 J	2770 J	402 J	647 J
Total HxCDFs			58.7 J	24.7 J	(1250) J	1750 J	389 J	597 J
Total HpCDFs			38.1 J	11.2 J	(1090) J	1690 J	360 J	533 J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

() = Less than Reporting Limit

For RCL 8290_P

Table 1a

Dioxin Analytical Results in Soil
Validated Results (Sampled from 6/21/99 - 11/5/99)

Page: 1F of 10

Date: 02/24/00

EPA Centredale Manor Apartments
Centredale, RI

CONSTITUENT	(Units in ng/kg)	SITE	CMS-471	CMS-472	CMS-473	CMS-474	CMS-474	CMS-474
		SAMPLE ID	CMS-471-C	CMS-472-A	CMS-473-A	CMS-474-A	CMS-474-B	CMS-474-C
		DATE	07/29/99	07/29/99	07/29/99	07/29/99	07/29/99	07/29/99
		DEPTH (ft)	2.50	0.50	0.50	0.50	1.50	2.50
		RESULT TYPE	Primary	Primary	Primary	Primary	Primary	Primary
2,3,7,8-TCDD			321 J	1430 J	<0.772 UJ	47.4	74.2	258
1,2,3,7,8-PeDD			1.07	12.5	<0.923 UJ	3.25	5.75	3.91
1,2,3,4,7,8-HxDD			1.00	27.3	0.786	2.76	2.69	3.04
1,2,3,6,7,8-HxDD			2.86	80.4	1.37	13.4	14.8	11.7
1,2,3,7,8,9-HxDD			2.00	59.1	1.12	9.39	9.08	8.12
1,2,3,4,6,7,8-HpDD			47.5	1800	16.2	138	148	117
OCDD			269 J	13200 J	268 J	909 J	1030 J	908 J
2,3,7,8-TCDF			2.39	8.61	3.72	18.2	19.3	12.7
1,2,3,7,8-PeDF			1.63	6.78	2.93	9.39	9.93	7.47
2,3,4,7,8-PeDF			6.33	22.7	5.96	29.0	28.7	22.0
1,2,3,4,7,8-HxDF			4.03	18.9	4.63	15.0	14.7	11.6
1,2,3,6,7,8-HxDF			4.62	20.0	4.16	11.3	11.2	9.39
2,3,4,6,7,8-HxDF			4.70	28.6	6.77	20.2	20.0	15.3
1,2,3,7,8,9-HxDF			1.16	4.45	1.54	3.83	3.42	3.84
1,2,3,4,6,7,8-HpDF			67.6	290	24.5	98.3	106	91.5
1,2,3,4,7,8,9-HpDF			2.96	23.7	2.14	4.49	5.19	4.13
OCDF			63.0	990	20.6	72.3	84.7	62.0
Total TCDDs			333 J	(1450) J	<7.85 UJ	(77.1) J	(110) J	280 J
Total PeCDDs			(10.4) J	(67.5) J	(10.9) J	(50.4) J	57.6 J	44.8 J
Total HxCDDs			(22.4) J	505 J	16.3 J	116 J	129 J	(97.5) J
Total HpCDDs			89.0 J	3640 J	32.0 J	256 J	265 J	209 J
Total TCDFs			(62.6) J	(188) J	(70.8) J	(247) J	(282) J	(187) J
Total PeCDFs			(77.7) J	253 J	(56.6) J	260 J	(261) J	208 J
Total HxCDFs			(92.8) J	(449) J	46.7 J	204 J	197 J	168 J
Total HpCDFs			(120) J	(784) J	36.2 J	159 J	179 J	156 J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

(I) = Less than Reporting Limit

For RCL 8290

Table 1a

Dioxin Analytical Results in Soil
Validated Results (Sampled from 6/21/99 - 11/5/99)

Page: 1G of 10

Date: 02/24/00

EPA Centredale Manor Apartments

Centredale, RI

CONSTITUENT	(Units in ng/kg)	SITE	CMS-475	CMS-476	CMS-477	CMS-477	CMS-477	CMS-477
		SAMPLE ID	CMS-475-A	CMS-476-A	CMS-477-A	CMS-477-B	HA13-FD	CMS-477-C
		DATE	07/29/99	07/29/99	07/29/99	07/29/99	07/29/99	07/29/99
		DEPTH (ft)	0.50	0.50	0.50	1.50	1.50	2.50
		RESULT TYPE	Primary	Primary	Primary	Primary	Duplicate 1	Primary
2,3,7,8-TCDD			<2.76 UJ	5300 J	5150 J	240 J	63.4	2730 J
1,2,3,7,8-PeDD			<0.727 UJ	36.0 J	13.3	<0.425 UJ	<0.235 UJ	10.6
1,2,3,4,7,8-HxDD			0.845	37.8	11.4	0.439	<0.281 U	5.17
1,2,3,6,7,8-HxDD			2.04	81.5 J	32.3	1.27	<0.611 UJ	17.3
1,2,3,7,8,9-HxDD			1.48	89.4 J	23.2	1.05	0.459	11.7
1,2,3,4,6,7,8-HpDD			30.3	1270	628	24.9 J	8.47	286
OCDD			196 J	5250 J	3740 J	158 J	57.4	1800 J
2,3,7,8-TCDF			2.62	43.2 J	30.8	1.75	2.13	14.5
1,2,3,7,8-PeDF			1.78	22.0	22.9	0.360	0.601	4.94
2,3,4,7,8-PeDF			3.91	56.2	43.7	1.71	1.09	25.5
1,2,3,4,7,8-HxDF			2.53	38.0	55.0	1.48	0.930	15.2
1,2,3,6,7,8-HxDF			2.22	31.0	68.0	1.08	0.922	15.9
2,3,4,6,7,8-HxDF			3.69	46.2	42.7	1.11	0.771	18.0
1,2,3,7,8,9-HxDF			0.766	10.0	9.10	0.392	0.240	2.29
1,2,3,4,6,7,8-HpDF			11.1	177	446	8.50	6.22	191
1,2,3,4,7,8,9-HpDF			1.21	13.6	32.7	0.609	0.498	8.79
OCDF			12.2	196	730	10.8	7.59	203
Total TCDDs			(14.0) J	5620 J	5310 J	248 J	(66.5) J	2830 J
Total PeCDDs			(13.2) J	(392) J	118 J	<4.18 UJ	<1.94 UJ	61.0 J
Total HxCDDs			25.4 J	762 J	(254) J	(11.6) J	<3.70 UJ	(129) J
Total HpCDDs			56.1 J	2160 J	1090 J	47.1 J	15.3 J	511 J
Total TCDFs			(47.1) J	1200 J	(756) J	(27.7) J	(19.9) J	(361) J
Total PeCDFs			42.1 J	(897) J	(974) J	23.9 J	(14.8) J	(213) J
Total HxCDFs			28.5 J	591 J	852 J	20.7 J	<11.1 UJ	346 J
Total HpCDFs			19.6 J	325 J	(848) J	16.9 J	10.5 J	353 J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

() = Less than Reporting Limit

For RCL 8290_P

Table 1a

Dioxin Analytical Results in Soil
Validated Results (Sampled from 6/21/99 - 11/5/99)

Page: 1H of 10

Date: 02/24/00

EPA Centredale Manor Apartments
Centredale, RI

CONSTITUENT	(Units in ng/kg)	SITE	CMS-477	CMS-478	CMS-479	CMS-480	CMS-481	CMS-482
		SAMPLE ID	CMS-477-C-QC	CMS-478-A	CMS-479-A	CMS-480-A	CMS-481-A	CMS-482-A
		DATE	07/29/99	07/29/99	07/29/99	07/29/99	07/30/99	07/30/99
		DEPTH (ft)	2.50	0.50	0.50	0.50	0.50	0.50
		RESULT TYPE	Duplicate 1	Primary	Primary	Primary	Primary	Primary
2,3,7,8-TCDD			8800 J	48.4	3.97	7.53	21.7 J	7.32 J
1,2,3,7,8-PeDD			16 J	10.8	1.18	<0.936 UJ	9.03	<0.612 UJ
1,2,3,4,7,8-HxDD			12 J	8.62	1.28	0.972	23.7	0.606
1,2,3,6,7,8-HxDD			49 J	26.8	4.81	2.62	134	1.83
1,2,3,7,8,9-HxDD			41 J	19.0	<3.00	1.77	48.5	1.12
1,2,3,4,6,7,8-HpDD			870 J	373	47.5	38.1	1940 J	26.3
OCDD			5500 J	1760 J	284 J	202 J	9900 J	181 J
2,3,7,8-TCDF			24 J	53.3	4.32	3.53	<4.85	1.40
1,2,3,7,8-PeDF			<9.4 UJ	37.3	2.35	3.25	7.18	0.829
2,3,4,7,8-PeDF			19 J	48.5	5.65	5.69	26.9	4.73
1,2,3,4,7,8-HxCDF			34 J	38.2	3.06	3.42	19.8	1.46
1,2,3,6,7,8-HxCDF			27 J	32.1	2.53	2.80	25.8	1.40
2,3,4,6,7,8-HxCDF			17 J	45.0	3.92	3.56	44.5	2.81
1,2,3,7,8,9-HxCDF			<0.82 UJ	11.2	0.916	0.906	7.82	<0.559 U
1,2,3,4,6,7,8-HpCDF			270 J	236	26.3	13.5	254	11.4
1,2,3,4,7,8,9-HpCDF			14 J	15.0	1.17	1.29	13.2	<0.831 UJ
OCDF			330 J	138	19.5	15.4	274	20.5
Total TCDDs			9100 J	(267) J	(11.5) J	(25.8) J	(35.3) J	(9.72) J
Total PeCDDs			81 J	260 J	(15.4) J	19.3 J	(49.3) J	(6.22) J
Total HxCDDs			330 J	347 J	(34.0) J	(29.2) J	538 J	(14.3) J
Total HpCDDs			1600 J	678 J	87.6 J	71.7 J	3330 J	51.3 J
Total TCDFs			1100 J	1110 J	(57.9) J	(56.5) J	(86.5) J	(26.2) J
Total PeCDFs			810 J	629 J	(61.7) J	55.7 J	343 J	51.3 J
Total HxCDFs			560 J	413 J	43.7 J	37.1 J	711 J	(34.0) J
Total HpCDFs			560 J	368 J	47.6 J	26.1 J	(616) J	25.4 J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

(I) = Less than Reporting Limit

For RCL 8290_

Table 1a

Dioxin Analytical Results in Soil
Validated Results (Sampled from 6/21/99 - 11/5/99)

Page: 11 of 10

Date: 02/24/00

EPA Centredale Manor Apartments

Centredale, RI

CONSTITUENT (Units in ng/kg)	SITE	CMS-483	CMS-483	CMS-483	CMS-484	CMS-484	CMS-484
	SAMPLE ID	CMS-483-A	CMS-483-B	CMS-483-C	CMS-484-A	CMS-484-B	HA 14-FD
	DATE	07/30/99	07/30/99	07/30/99	07/30/99	07/30/99	07/30/99
	DEPTH (ft)	0.50	1.50	2.50	0.50	1.50	1.50
	RESULT TYPE	Primary	Primary	Primary	Primary	Primary	Duplicate 1
2,3,7,8-TCDD		273 J	2730 J	1930 J	<0.510 UJ	3.59 J	1.15 J
1,2,3,7,8-PeDD		14.5	7.89	45.2	<0.794 UJ	<0.695 UJ	<0.722 UJ
1,2,3,4,7,8-HxDD		42.3	8.89	85.8	1.74	1.03	1.40
1,2,3,6,7,8-HxDD		268	29.2	199	3.83	3.68	4.64
1,2,3,7,8,9-HxDD		89.2	21.7	226	3.45	2.05	2.81
1,2,3,4,6,7,8-HpDD		3750 J	575	8150 J	77.8 J	77.7	97.2
OCDD		16800 J	3180 J	45100 J	507 J	475 J	625 J
2,3,7,8-TCDF		4.51	4.24	25.4	0.441	0.676	1.32
1,2,3,7,8-PeDF		10.7	2.65	7.28	<0.347 UJ	<0.434 UJ	0.757
2,3,4,7,8-PeDF		32.0	20.2	56.9	3.03 J	3.68	5.91 J
1,2,3,4,7,8-HxDF		31.8	11.1	27.8	1.20	1.15	1.82
1,2,3,6,7,8-HxDF		58.4	9.01	14.1	1.38	1.40	2.06
2,3,4,6,7,8-HxDF		70.0	12.7	24.2	2.51 J	2.48	4.34 J
1,2,3,7,8,9-HxDF		12.2	3.07	7.37	<0.495 UJ	<0.401 UJ	<0.670 UJ
1,2,3,4,6,7,8-HpDF		496	61.6	101	18.4	20.7	26.8
1,2,3,4,7,8,9-HpDF		22.9	4.65	8.51	1.85	1.46	2.02
OCDF		351	108 J	168	61.4	63.7	80.5
Total TCDDs		279 J	2770 J	2010 J	<0.510 J	(6.52) J	<3.23 UJ
Total PeCDDs		81.5 J	43.8 J	(237) J	<3.66 J	(6.19) J	<3.95 UJ
Total HxCDDs		1100 J	187 J	(1510) J	24.4 J	23.1 J	(30.7)
Total HpCDDs		6550 J	991 J	13000 J	135 J	134 J	187
Total TCDFs		(81.3) J	(113) J	503 J	(13.7) J	(22.1) J	(38.0)
Total PeCDFs		481 J	131 J	(603) J	40.7 J	(47.6) J	(70.4)
Total HxCDFs		1180 J	290 J	721 J	(36.8) J	(42.0) J	(55.0)
Total HpCDFs		(1020) J	144 J	247 J	51.3 J	65.7 J	80.7

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed
(l) = Less than Reporting Limit
For RCL 8290_P

Table 1a

Dioxin Analytical Results in Soil
Validated Results (Sampled from 6/21/99 - 11/5/99)

Page: 1J of 10

Date: 02/24/00

EPA Centredale Manor Apartments
Centredale, RI

CONSTITUENT	(Units in ng/kg)	SITE	CMS-484	CMS-484	CMS-485	CMS-486	CMS-487	CMS-487
		SAMPLE ID	CMS-484-C	CMS-484-C-QC	CMS-485-A	CMS-486-A	CMS-487-A	CMS-487-B
		DATE	07/30/99	07/30/99	07/30/99	07/30/99	07/30/99	07/30/99
		DEPTH (ft)	2.50	2.50	0.50	0.50	0.50	1.50
		RESULT TYPE	Primary	Duplicate 1	Primary	Primary	Primary	Primary
2,3,7,8-TCDD			<0.415 UJ	4.4	2.26 J	3.76 J	44900 J	22800 J
1,2,3,7,8-PeDD			1.89	<2.7 U	2.07	<0.375 UJ	78.9 J	42.9 J
1,2,3,4,7,8-HxDD			1.54	<1.6 U	3.27	<0.406 U	61.1 J	41.4 J
1,2,3,6,7,8-HxDD			6.48	10	5.90	<1.03	138 J	95.6 J
1,2,3,7,8,9-HxDD			3.61	6.1	3.85	0.897	139 J	98.7 J
1,2,3,4,6,7,8-HpDD			32.8	61	72.8	13.5	2300 J	1480 J
OCDD			140 J	430 J	413 J	98.7 J	9710 J	6320 J
2,3,7,8-TCDF			3.65	7.6	2.39	1.10	117 J	82.0 J
1,2,3,7,8-PeDF			<1.68 U	3.8	12.8	0.855	14.3 J	17.7 J
2,3,4,7,8-PeDF			78.3	16	26.8	2.24	99.4 J	135 J
1,2,3,4,7,8-HxDF			6.14	12	60.6	1.58	42.9 J	64.0 J
1,2,3,6,7,8-HxDF			13.8	20	37.6	1.14	34.0 J	61.1 J
2,3,4,6,7,8-HxDF			38.8	20	40.7	1.61	50.2 J	83.1 J
1,2,3,7,8,9-HxDF			3.66	<0.40 U	11.6	<0.384 U	9.98 J	17.9 J
1,2,3,4,6,7,8-HpDF			27.4	51	597	7.13	275 J	586 J
1,2,3,4,7,8,9-HpDF			2.36	3.5	29.8	<0.851	17.9 J	35.7 J
OCDF			32.8	62 J	669	11.4 J	409 J	604 J
Total TCDDs			(8.29) J	24 J	(14.4) J	(6.63) J	45500 J	23200 J
Total PeCDDs			(25.4) J	15 J	24.5 J	<3.30 UJ	(526) J	366 J
Total HxCDDs			61.8 J	86 J	56.5 J	(5.62) J	1080 J	860 J
Total HpCDDs			66.3 J	130 J	140 J	28.9 J	4000 J	2670 J
Total TCDFs			397 J	490 J	(125) J	(13.2) J	3400 J	(1870) J
Total PeCDFs			850 J	960 J	301 J	(23.2) J	(1960) J	2110 J
Total HxCDFs			466 J	640 J	419 J	(15.3) J	1070 J	1450 J
Total HpCDFs			65.0 J	130 J	739 J	(11.3) J	599 J	1070 J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

(I) = Less than Reporting Limit

For RGL 8290

Table 1a

Dioxin Analytical Results in Soil
Validated Results (Sampled from 6/21/99 - 11/5/99)

Page: 1K of 10

Date: 02/24/00

EPA Centredale Manor Apartments
Centredale, RI

CONSTITUENT (Units in ng/kg)	SITE	CMS-487	CMS-488	CMS-489	CMS-490	CMS-490	CMS-490
	SAMPLE ID	CMS-487-C	CMS-488-A	CMS-489-A	CMS-490-A	CMS-490-B	HA15-FD
	DATE	07/30/99	07/30/99	07/30/99	07/30/99	07/30/99	07/30/99
	DEPTH (ft)	2.50	0.50	0.50	0.50	1.50	1.50
	RESULT TYPE	Primary	Primary	Primary	Primary	Primary	Duplicate 1
2,3,7,8-TCDD		6870 J	<0.481 UJ	16200 J	728 J	307	450#
1,2,3,7,8-PeDD		33.5 J	<0.361 UJ	77.4 J	1.73 J	0.835 J	0.932#
1,2,3,4,7,8-HxDD		30.4	<0.383	69.3	1.44	0.878	0.990#
1,2,3,6,7,8-HxDD		75.4	1.71	165	4.03	2.38	2.64#
1,2,3,7,8,9-HxDD		68.1	0.996	168	3.18	1.85	2.06#
1,2,3,4,6,7,8-HpDD		1090	19.0	2700	91.3	51.9	55.8#
OCDD		4710 J	175 J	11900 J	585	336	350#
2,3,7,8-TCDF		61.1	0.766	111	4.16	2.22	2.57#
1,2,3,7,8-PeDF		13.4	<0.522 UJ	17.9	1.07	0.716	0.729#
2,3,4,7,8-PeDF		93.1	2.06	89.3	4.46	2.52	3.11#
1,2,3,4,7,8-HxDF		44.7	1.12	56.3	3.25	2.07	4.3#
1,2,3,6,7,8-HxDF		46.4	0.94	41.7	3.58	2.51	3.8# J
2,3,4,6,7,8-HxDF		61.0	1.30	57.0	3.48	2.26	2.44#
1,2,3,7,8,9-HxDF		8.96	<0.346 UJ	11.2	0.708	<0.583 U	<0.82# U
1,2,3,4,6,7,8-HpDF		644	5.80	329	37.8	30.2	42#
1,2,3,4,7,8,9-HpDF		23.1	<0.500 UJ	22.2	2.19	1.70	1.83#
OCDF		520	9.11	499	54.4	39.5	41.0#
Total TCDDs		7120 J	<1.95 UJ	1700 J	753 J	318 J	460# J
Total PeCDDs		(256) J	<3.25 UJ	(572) J	(14.2) J	(3.83) J	(8.27)# J
Total HxCDDs		592 J	(11.4) J	1300 J	(34.2) J	21.3 J	(22.2)# J
Total HpCDDs		1930 J	42.6 J	4680 J	166 J	97.1 J	103# J
Total TCDFs		1450 J	(11.2) J	(3130) J	(85.7) J	(47.7) J	68# J
Total PeCDFs		1560 J	(19.9) J	2110 J	(80.0) J	(48.2) J	55# J
Total HxCDFs		1130 J	(15.6) J	(1090) J	(71.0) J	47.5 J	58# J
Total HpCDFs		1160 J	(12.4) J	671 J	71.7 J	(56.4) J	73# J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

= Constituent in more than one test method, highest result reported. () = Less than Reporting Limit

For RCL 8290_P

Table 1a

Dioxin Analytical Results in Soil
Validated Results (Sampled from 6/21/99 - 11/5/99)

Page: 1L of 10

Date: 02/24/00

EPA Centredale Manor Apartments
Centredale, RI

CONSTITUENT	(Units in ng/kg)	SITE	CMS-491	CMS-492	CMS-493	CMS-493	CMS-493	CMS-494
		SAMPLE ID	CMS-491-A	CMS-492-A	CMS-493-A	CMS-493-B	CMS-493-C	CMS-494-A
		DATE	07/30/99	07/30/99	07/30/99	07/30/99	07/30/99	08/12/99
		DEPTH (ft)	0.50	0.50	0.50	1.50	2.50	0.50
		RESULT TYPE	Primary	Primary	Primary	Primary	Primary	Primary
2,3,7,8-TCDD			2.41	35.2	693 J	1370 J	654 J	4130 J
1,2,3,7,8-PeDD			7.84	0.399	1.87	4.53	4.59	13.4
1,2,3,4,7,8-HxDD			0.367	0.571	1.60	4.38	4.77	10.3
1,2,3,6,7,8-HxDD			2.44	1.51	4.44	12.2	12.2	31.9
1,2,3,7,8,9-HxDD			1.25	1.08	3.71	9.80	9.43	22.9
1,2,3,4,6,7,8-HpDD			14.6	31.3	81.3	218	185	508
OCDD			120	352	506	1350	916	2730
2,3,7,8-TCDF			0.799	0.503	2.86	12.9	11.9	28.3
1,2,3,7,8-PeDF			0.504	0.337	0.594	2.50	7.77	12.7
2,3,4,7,8-PeDF			4.65	2.35	5.64	17.2	20.6	52.0
1,2,3,4,7,8-HxDF			1.07	0.827	1.62	8.91	20.5	37.0
1,2,3,6,7,8-HxDF			1.24	0.877	1.72	9.00	28.0	42.5
2,3,4,6,7,8-HxDF			2.69	1.56	3.23	10.9	21.0	43.7
1,2,3,7,8,9-HxDF			0.388	0.322	<0.468 U	2.14	4.85	9.24
1,2,3,4,6,7,8-HpDF			6.97	7.79	14.2	73.7	194	498
1,2,3,4,7,8,9-HpDF			<0.525 UJ	<0.695 UJ	1.13	5.20	16.5	25.6
OCDF			11.0	19.4	32.6	125	292	387
Total TCDDs			(4.85) J	(36.8) J	714 J	1440 J	(691) J	4270 J
Total PeCDDs			(30.6) J	(3.87) J	(13.2) J	(47.4) J	44.8 J	(112) J
Total HxCDDs			20.1 J	(13.9) J	34.7 J	(101) J	111 J	279 J
Total HpCDDs			37.7 J	71.9 J	164 J	456 J	356 J	944 J
Total TCDFs			(27.2) J	(12.7) J	(91.6) J	(339) J	345 J	(662) J
Total PeCDFs			48.6 J	(28.8) J	89.0 J	284 J	(408) J	(964) J
Total HxCDFs			32.8 J	22.6 J	(90.5) J	203 J	363 J	(787) J
Total HpCDFs			15.8 J	18.7 J	34.4 J	156 J	350 J	866 J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

(I) = Less than Reporting Limit

For RCL 8290_

Table 1a

Dioxin Analytical Results in Soil
Validated Results (Sampled from 6/21/99 - 11/5/99)

Page: 1M of 10

Date: 02/24/00

EPA Centredale Manor Apartments

Centredale, RI

CONSTITUENT	(Units in ng/kg)	SITE	CMS-495	CMS-496	CMS-497	CMS-498	CMS-499	CMS-500
		SAMPLE ID	CMS-495-A	CMS-496-A	CMS-497-A	CMS-498-A	CMS-499-A	CMS-500-A
		DATE	08/12/99	08/12/99	08/12/99	08/12/99	08/12/99	08/12/99
		DEPTH (ft)	0.50	0.50	0.50	0.50	0.50	0.50
		RESULT TYPE	Primary	Primary	Primary	Primary	Primary	Primary
2,3,7,8-TCDD			7560 J	574 J	78.4	84.9	90.3	16.8 J
1,2,3,7,8-PeDD			17.6	6.08	0.553	<0.558	0.876	0.846 J
1,2,3,4,7,8-HxDD			13.8	8.95	<0.176 U	0.640	0.806	0.831 J
1,2,3,6,7,8-HxDD			39.0	20.4	1.96	1.53	2.09	2.04 J
1,2,3,7,8,9-HxDD			30.3	18.5	1.46	1.44	1.59	1.49 J
1,2,3,4,6,7,8-HpDD			692	301	30.2	27.7	41.9	22.0 JEB
OCDD			4030	1620	229	185	271	119 J
2,3,7,8-TCDF			38.9	9.90	1.61	1.08	1.44	9.49 J
1,2,3,7,8-PeDF			7.66	6.14 J	0.801	0.519	0.691	3.45 J
2,3,4,7,8-PeDF			53.3	19.3 J	2.94	1.31	1.82	11.3 J
1,2,3,4,7,8-HxDF			25.8 J	11.7 J	1.27 J	0.841 J	1.07 J	2.97 J
1,2,3,6,7,8-HxDF			21.9 J	8.44 J	1.05 J	0.632 J	0.852 J	2.97 J
2,3,4,6,7,8-HxDF			29.6 J	13.5 J	1.91 J	0.958 J	1.36 J	4.90 J
1,2,3,7,8,9-HxDF			6.96 J	2.88 J	0.386 J	<0.210	0.292 J	<0.694 UJ
1,2,3,4,6,7,8-HpDF			306	63.0	7.36	5.36	6.51	11.1 J
1,2,3,4,7,8,9-HpDF			13.4	9.34	<0.574 UJ	<0.301 UJ	<0.480 UJ	<1.02
OCDF			291	151	14.3	12.4	12.2	10.5 J
Total TCDDs			7810 J	(609) J	(81.8) J	(89.0) J	(94.9) J	(41.6) J
Total PeCDDs			141 J	(62.0) J	(7.01) J	(5.37) J	(5.82) J	(14.1) JEB
Total HxCDDs			(318) J	(183) J	(9.41) J	(13.9) J	(12.5) J	21.7 JEB
Total HpCDDs			1270 J	558 J	60.1 J	54.4 J	73.7 J	45.6 JEB
Total TCDFs			(888) J	(202) J	(27.4) J	(14.5) J	(19.8) J	(115) J
Total PeCDFs			(1010) J	189 J	28.1 J	(14.7) J	(16.5) J	(112) J
Total HxCDFs			541 J	204 J	25.6 J	(17.2) J	20.0 J	(55.6) J
Total HpCDFs			564 J	(130) J	16.2 J	10.5 J	13.6 J	(17.3) J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

(I) = Less than Reporting Limit

For RCL 8290_P

Table 1a
Dioxin Analytical Results in Soil
Validated Results (Sampled from 6/21/99 - 11/5/99)

Page: 1N of 10

Date: 02/24/00

EPA Centredale Manor Apartments
Centredale, RI

CONSTITUENT	(Units in ng/kg)	SITE	CMS-500	CMS-501	CMS-502	CMS-503	CMS-504	CMS-504
		SAMPLE ID	HA16-FD	CMS-501-A	CMS-502-A	CMS-503-A	CMS-504-A	CMS-504-A-QC
		DATE	08/12/99	08/12/99	08/12/99	08/12/99	08/12/99	08/13/99
		DEPTH (ft)	0.50	0.50	0.50	0.50	0.50	0.50
		RESULT TYPE	Duplicate 1	Primary	Primary	Primary	Primary	Primary
2,3,7,8-TCDD			22.7 J	20.0	64.3	19.2	25.9	28
1,2,3,7,8-PeDD			1.46 J	0.507	0.961	<0.896	0.972	<1.9
1,2,3,4,7,8-HxDD			<1.38 U	<0.454	0.922	<0.682	0.957	<0.69
1,2,3,6,7,8-HxDD			3.13 J	1.14	2.02	1.84	1.90	<1.5
1,2,3,7,8,9-HxDD			2.32 J	0.807	1.48	1.14	1.52	<2.3
1,2,3,4,6,7,8-HpDD			28.8 JEB	5.95 JEB	23.7 EB	15.1 EB	21.0 EB	19
OCDD			129 J	95.5	143	94.1	130	110
2,3,7,8-TCDF			11.2 J	4.57	7.02	8.02	10.4	11 CON
1,2,3,7,8-PeDF			7.41 J	1.81	2.79	2.85	4.05	3.6 J
2,3,4,7,8-PeDF			14.5 J	3.43	4.84	7.87	6.60	4.6 J
1,2,3,4,7,8-HxDF			11.4 J	1.74	2.85	3.32	4.53	8.0
1,2,3,6,7,8-HxDF			9.13 J	1.37	2.15	2.82	3.32	3.3 J
2,3,4,6,7,8-HxDF			13.4 J	1.70	2.75	4.79	3.79	3.0 J
1,2,3,7,8,9-HxDF			2.80 J	<0.294 U	0.705	1.04	0.996	<0.43
1,2,3,4,6,7,8-HpDF			44.7 J	5.65	10.3	8.36	12.4	11
1,2,3,4,7,8,9-HpDF			4.18 J	0.492	1.14	1.12	1.56	<1.4
OCDF			26.6 J	6.62	13.0	10.8	15.7	13
Total TCDDs			(47.6) J	(28.9) J	(75.5) J	(32.7) J	(44.9) J	50
Total PeCDDs			(23.4) JEB	(8.59) JEB	(9.18) JEB	(9.11) JEB	(13.2) JEB	3.0
Total HxCDDs			(33.5) JEB	(13.4) JEB	22.8 JEB	(15.2) JEB	20.4 JEB	14
Total HpCDDs			59.4 JEB	11.2 JEB	47.5 JEB	29.1 JEB	40.8 JEB	36
Total TCDFs			(126) J	(23.0) J	(46.2) J	(70.0) J	(102) J	120
Total PeCDFs			(172) J	(41.2) J	56.2 J	(88.9) J	(75.0) J	63
Total HxCDFs			(116) J	21.1 J	(37.4) J	(56.8) J	(45.3) J	41
Total HpCDFs			(66.8) J	9.08 J	17.5 J	15.8 J	21.3 J	17

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

(J) = Less than Reporting Limit

For RCL 8290_

Table 1a

Dioxin Analytical Results in Soil
Validated Results (Sampled from 6/21/99 - 11/5/99)

Page: 10 of 10

Date: 02/24/00

EPA Centredale Manor Apartments

Centredale, RI

CONSTITUENT (Units in ng/kg)	SITE	CMS-505	CMS-506	CMS-507	CMS-508
	SAMPLE ID	CMS-505-A	CMS-506-A	CMS-507-A	CMS-508-A
	DATE	08/12/99	08/12/99	08/12/99	08/12/99
	DEPTH (ft)	0.50	0.50	0.50	0.50
	RESULT TYPE	Primary	Primary	Primary	Primary
2,3,7,8-TCDD		9.60	21.2	43.4	15.7
1,2,3,7,8-PeDD		<0.495	0.690	0.493	0.505
1,2,3,4,7,8-HxDD		<0.556	0.816	0.431	<0.509
1,2,3,6,7,8-HxDD		1.19	2.85	1.65	1.29
1,2,3,7,8,9-HxDD		1.03	1.92	1.11	0.965
1,2,3,4,6,7,8-HpDD		15.5 EB	49.8 EB	27.2 EB	16.8 EB
OCDD		145	370	264	119
2,3,7,8-TCDF		5.36	2.17	1.86	1.32
1,2,3,7,8-PeDF		1.78	1.37	0.902	0.971
2,3,4,7,8-PeDF		3.25	3.28	4.14	2.58
1,2,3,4,7,8-HxDF		1.52	1.95	1.45	1.53
1,2,3,6,7,8-HxDF		1.32	1.70	1.45	1.36
2,3,4,6,7,8-HxDF		2.19	2.34	<2.69	2.16
1,2,3,7,8,9-HxDF		0.455	<0.530	0.440	<0.529
1,2,3,4,6,7,8-HpDF		5.99	13.1	8.45	7.50
1,2,3,4,7,8,9-HpDF		0.536	1.06	0.680	0.643
OCDF		7.82	19.9	13.9	11.3
Total TCDDs		17.3 J	(29.2) J	(48.0) J	(19.0) J
Total PeCDDs		(5.99) JEB	(8.66) JEB	(5.54) JEB	(6.34) JEB
Total HxCDDs		(10.9) JEB	(22.2) JEB	(11.6) JEB	(11.7) JEB
Total HpCDDs		30.7 JEB	92.4 JEB	52.1 JEB	32.4 JEB
Total TCDFs		(48.0) J	(31.5) J	(25.9) J	(21.2) J
Total PeCDFs		(36.3) J	(34.8) J	(41.9) J	(29.8) J
Total HxCDFs		(23.5) J	(32.8) J	(25.6) J	(21.4) J
Total HpCDFs		11.0 J	(25.7) J	(17.6) J	14.3 J

Values represent total concentrations unless noted < = Not detected at indicated reporting limit --- = Not analyzed

() = Less than Reporting Limit

For RCL 8290_P