

LIQUID WASTE DISCHARGES OF 1991

Reference Date: 10/1/90

Half Life (hrs) = 106872

Half Life (days) = 4453

Old Value

Year	Quarter	Date of Discharge	Gross B/G Micro Ci/cc	H-3 Conc. Micro Ci/cc	Co-60 Gam. Spec. Micro Ci/cc	Volume Discharged Gallons	Gross B/G Micro Ci	H-3 Micro Ci	Co-60 Micro Ci	H-3 Conc. μCi/cc
1991	1 st	1/24/91	2.91E-08	5.36E-04	9.72E-07	2720	0.300	5521.472	10.007	5.46E-04
		1/24/91	8.25E-08	5.05E-04	9.72E-07	1380	0.431	2639.720	5.077	5.15E-04
	2 nd	4/5/91	3.30E-08	7.07E-05	5.40E-07	3300	0.413	883.365	6.745	7.28E-05
		4/5/91	2.30E-08	5.71E-05	2.35E-06	1500	0.130	324.092	13.342	5.88E-05
		4/29/91	2.82E-08	5.20E-05	3.88E-07	2800	0.299	550.609	4.112	5.37E-05
		4/29/91	1.39E-07	4.54E-05	7.25E-07	2500	1.315	429.522	6.860	4.69E-05
		5/29/91	3.16E-08	2.12E-05	5.67E-07	2000	0.240	160.653	4.292	2.20E-05
		5/29/91	6.69E-07	1.48E-04	2.97E-07	2400	6.076	1343.274	2.698	1.54E-04
		6/4/91	4.51E-09	1.77E-05	8.11E-07	2700	0.046	181.173	8.288	1.84E-05
		6/4/91	1.76E-07	5.80E-05	3.94E-07	2300	1.530	505.141	3.426	6.03E-05
		6/21/91	4.62E-08	2.21E-05	1.16E-06	3300	0.577	276.240	14.489	2.30E-05
		6/21/91	2.31E-08	4.88E-05	2.24E-07	1700	0.149	314.196	1.441	5.09E-05
	3 rd	7/5/91	7.90E-08	8.27E-05	1.03E-06	3360	1.004	1051.465	13.099	8.63E-05
		7/5/91	1.12E-07	7.65E-05	8.50E-07	1620	0.684	468.782	5.212	7.98E-05
		7/18/91	4.57E-09	3.40E-05	4.19E-07	3200	0.055	412.160	5.075	3.56E-05
		7/18/91	1.83E-08	4.66E-05	2.74E-07	1600	0.111	282.086	1.659	4.87E-05
		7/25/91	5.81E-08	4.35E-05	4.78E-07	3400	0.748	560.197	6.151	4.56E-05
		7/25/91	7.75E-08	5.08E-05	2.70E-07	1400	0.411	269.072	1.431	5.32E-05
		8/5/91	2.38E-08	5.15E-05	6.61E-07	3000	0.270	584.472	7.506	5.40E-05
		8/5/91	9.50E-09	5.68E-05	4.99E-07	1300	0.047	279.396	2.455	5.96E-05
		8/20/91	1.32E-06	1.58E-04	4.29E-07	3600	17.959	2151.027	5.846	1.66E-04
		8/20/91	3.27E-08	1.63E-04	3.62E-07	1400	0.173	862.210	1.918	1.71E-04
		8/30/91	5.63E-07	1.80E-05	4.54E-07	2400	5.116	163.448	4.124	1.90E-05
	4 th	8/30/91	4.69E-09	4.13E-05	2.56E-07	1800	0.032	281.398	1.744	4.35E-05
		9/12/91	1.01E-07	7.85E-05	1.09E-06	2400	0.915	712.984	9.902	8.28E-05
		9/12/91	1.39E-07	8.45E-05	6.10E-07	1200	0.632	383.779	2.771	8.92E-05
		9/18/91	1.75E-07	4.12E-05	2.19E-06	3500	2.324	545.422	29.012	4.35E-05
		9/18/91	1.90E-08	4.07E-05	4.28E-07	1400	0.100	215.661	2.268	4.30E-05
		11/11/91	6.77E-07	9.28E-05	3.53E-07	2750	7.043	965.417	3.674	9.88E-05
		11/11/91	5.05E-09	9.33E-05	4.57E-07	2200	0.042	777.024	3.805	9.94E-05
		12/18/91	2.37E-08	6.63E-04	2.78E-07	1600	0.144	4016.140	1.684	7.11E-04
		12/18/91	2.00E-08	8.15E-04	2.91E-07	1900	0.144	5859.932	2.093	8.73E-04
		12/18/91	3.51E-08	7.38E-04	2.99E-07	1300	0.173	3632.826	1.471	7.91E-04

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LIQUID WASTE DISCHARGES OF 1991

Dilution factor (cc/Qtr) = 2.371E+11

Total Activity Released / Quarter for 1991

Gross	H-3	Co-60
Micro Ci	Micro Ci	Micro Ci

1st QTR	0.7305	8161.1920	15.0840
2nd QTR	10.7750	4968.2640	65.6934
3rd QTR	30.5795	9223.5589	100.1727
4th QTR	7.5447	15251.3387	12.7273

Yearly Total =	49.6297	37604.3535	193.6773
Yearly Total (Ci) =	4.963E-05	3.760E-02	1.937E-04
AVG Yearly			
Conc. μ Ci/cc =	1.750E-07	1.326E-04	6.829E-07
Tech Spec			
μ Ci/cc =	3.000E-06	1.000E-01	5.000E-05
% Tech Spec =	5.83	0.13	1.37

Quarterly Volume Discharged from NNRC for 1991

	Gals	cc
1st QTR	4.1000E+03	1.5519E+07
2nd QTR	2.4500E+04	9.2733E+07
3rd QTR	3.6580E+04	1.3846E+08
4th QTR	9.7500E+03	3.6904E+07

Yearly Total =	7.4930E+04	2.8361E+08
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NOTE: Total Alpha radioactivity released and average
Concentration released is < MDA

Quarterly Average Release Based on the Ga Tech Dilution factor

Gross B/G	H-3	Co-60
Micro Ci/cc	Micro Ci/cc	Micro Ci/cc

1st QTR	3.0810E-12	3.4421E-08	6.3619E-11
2nd QTR	4.5445E-11	2.0954E-08	2.7707E-10
3rd QTR	1.2897E-10	3.8902E-08	4.2249E-10
4th QTR	3.1821E-11	6.4324E-08	5.3679E-11

Quarterly Average Release Based on the NNRC quarterly volume discharged

Gross B/G	H-3	Co-60
Micro Ci/cc	Micro Ci/cc	Micro Ci/cc

1st QTR	4.7074E-08	5.2590E-04	9.7200E-07
2nd QTR	1.1619E-07	5.3576E-05	7.0842E-07
3rd QTR	2.2086E-07	6.6618E-05	7.2350E-07
4th QTR	2.0444E-07	4.1327E-04	3.4488E-07

Maximum quarterly Concentration for 1991

Gross B/G	H-3	Co-60
Micro Ci/cc	Micro Ci/cc	Micro Ci/cc

1st QTR	8.2500E-08	5.3632E-04	9.7200E-07
2nd QTR	6.6890E-07	1.4787E-04	2.3500E-06
3rd QTR	1.3180E-06	1.6271E-04	2.1900E-06
4th QTR	6.7660E-07	8.1484E-04	4.5700E-07