LRC LIQUIDS RELEASED
FROM NNFD WASTE TREATMENT PLANT
FOR THE FIRST SIX MONTHS OF 1979

Isotope	*Release µCi	Concentrations µCi/ml ÷2.58 x 10^{11} ml	MPC	MPC Ratio
Co-60	47.6	1.84 x 10^{-10}	3 x 10^{-5}	0.000.006
Sr-90	12.3	4.8 x 10^{-11}	3 x 10^{-7}	0.000.159
Y-90	12.3	4.8 x 10^{-11}	2 x 10^{-5}	0.000.002
Ru-106	7.9	3.1 x 10^{-11}	1 x 10^{-5}	0.000.003
I-131	7.2	2.8 x 10^{-11}	3 x 10^{-7}	0.000.093
Cs-134	13.4	5.2 x 10^{-11}	9 x 10^{-6}	0.000.006
Cs-137	72.3	2.8 x 10^{-10}	2 x 10^{-5}	0.000.014
Ce-144	9.1	3.5 x 10^{-11}	1 x 10^{-5}	0.000.004
Gross Beta	161.8	6.3 x 10^{-10}	3 x 10^{-6}	0.000.209
Uranium	40.9	1.6 x 10^{-10}	2 x 10^{-5}	0.000.008
	384.8	1.49 x 10^{-9}		0.000.504

* Corrected for 50% efficiency of the NNFD waste treatment plant

LRC Air Activities released at the top of a 150 Foot Stack
For the First Six Months of 1979

Activity		Concentration**
Gross alpha particulate	< 0.02 µCi	< 5.3 x 10^{-20} µCi/ml
Gross beta particulate	< 0.41 µCi	< 9.7 x 10^{-19} µCi/ml
Kr-85	< 16.5 Ci	< 3.9 x 10^{-11} µCi/ml
H-3	< 1.4 Ci	< 3.3 x 10^{-12} µCi/ml

** Average for the six month period including 3,000 dilution factor for stack.

Note: Actual concentrations of long lived particulate activities in the stack discharge are less than background activities, because a large portion of the air in the stack enters through "Absolute" filters. Since the concentration is less than background there is no reasonable way to measure what contributions come from environmental background or from laboratory processes. Therefore the number reported is a maximum and not only includes environmental background but in all probability is environmental background.