



Annual Offsite Dose to Individuals and Populations from Liquid Effluent Releases from the U.S. EPR at BBNPP

DRINKING	CHILD	5.17E+05	1.66E-04	1.17E-02	1.16E-02	2.06E-02	1.16E-02	1.15E-02	1.19E-02	
DRINKING	TOTAL	3.73E+06	4.30E-04	4.91E-02	4.89E-02	7.73E-02	4.90E-02	4.87E-02	5.11E-02	
OPOPULATION=1.10E+04 DILUTION=5.00E+02 TRANSIT TIME=8.70E+01 HR (INCLUDING 24 HR FOR TREATMENT FACILITY)										
O AVERAGE INDIVIDUAL CONSUMPTION (L/YR)		ADULT=3.70E+02		TEEN=2.60E+02		CHILD=2.60E+02				
0-----CUMULATIVE TOTAL-----										
OPATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	
DRINKING	CUMUL TOTAL	5.39E+06	6.21E-04	7.09E-02	7.06E-02	1.12E-01	7.07E-02	7.03E-02	7.38E-02	
0 HYDROSPHERE TRITIUM DOSE										
O AVERAGE INDIVIDUAL WATER CONSUMPTION = 3.0 L/DAY										
OPATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	
WATER	TOTAL	2.86E+11	.00E+00	1.27E-02	1.27E-02	1.27E-02	1.27E-02	1.27E-02	1.27E-02	
1		*	*	*	RECREATION POPULATION DOSES * * *					
0										
O LOCATION- Shoreline-none										
ODILUTION=	9.99E+02	TRANSIT TIME= 9.99E+02 HR			SWF= .2					
0 DOSE (PERSON-REM)										
OPATHWAY	AGE GROUP	USAGE	SKIN	TOTAL BODY		THYROID				
SHORELINE	TOTAL POPUL	1.00E-09	1.35E-19	1.15E-19		1.15E-19				
0										
O LOCATION- Swimming-none										
ODILUTION=	9.99E+02	TRANSIT TIME= 9.99E+02 HR			DOSE (PERSON-REM)					
0										
OPATHWAY	AGE GROUP	USAGE	SKIN	TOTAL BODY		THYROID				
SWIMMING	TOTAL POPUL	1.00E-09	1.61E-21	1.61E-21		1.61E-21				
0										
O LOCATION- Boating										
ODILUTION=	1.75E+02	TRANSIT TIME= 2.90E+02 HR			DOSE (PERSON-REM)					
0										
OPATHWAY	AGE GROUP	USAGE	SKIN	TOTAL BODY		THYROID				
BOATING	TOTAL POPUL	5.65E+05	3.80E-06	3.80E-06		3.80E-06				
1		*	*	*	IRRIGATED FOOD PATHWAY * * *					
VEGETATION										
O TOTAL 50-MILE-PRODUCTION POPULATION SERVED= 2.64E+06										
O TOTAL POPULATION SERVED FROM IRRIGATED PRODUCTION= 4.50E+05										
O INDIVIDUAL DOSES (MREM PER YEAR INTAKE)										
0										
0										
ADULT	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI			
	6.83E-04	2.38E-03	2.13E-03	1.16E-02	1.97E-03	1.52E-03	8.03E-03			
TEENAGER	1.15E-03	3.31E-03	2.41E-03	1.69E-02	2.65E-03	1.93E-03	1.02E-02			
CHILD	2.75E-03	5.37E-03	3.33E-03	3.27E-02	4.27E-03	3.04E-03	9.48E-03			
O NOTE- INDIVIDUAL DOSES CALCULATED WITH DILUTION= 1.75E+02 AND TRANSIT TIME= .00E+00 HRS.										
O POPULATION DOSES (PERSON-REM)										
0										
0*	*	*	*	*						
0										
ADULT	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI			
	7.18E-02	2.70E-01	2.43E-01	1.87E-01	2.20E-01	1.76E-01	8.61E-01			
TEENAGER	1.96E-02	6.04E-02	4.42E-02	3.80E-02	4.73E-02	3.61E-02	1.76E-01			
CHILD	7.70E-02	1.62E-01	1.00E-01	1.03E-01	1.25E-01	9.37E-02	2.74E-01			



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TOTAL	1.68E-01	4.92E-01	3.88E-01	3.28E-01	3.92E-01	3.06E-01	1.31E+00
0\$ \$	ALARA DOSES	\$ \$ \$					
0	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
ADULT	4.17E-03	1.56E-02	1.41E-02	1.09E-02	1.27E-02	1.02E-02	4.99E-02
TEENAGER	1.14E-03	3.50E-03	2.56E-03	2.20E-03	2.74E-03	2.09E-03	1.02E-02
CHILD	4.46E-03	9.37E-03	5.82E-03	5.95E-03	7.26E-03	5.43E-03	1.59E-02
TOTAL	9.77E-03	2.85E-02	2.25E-02	1.90E-02	2.27E-02	1.78E-02	7.60E-02
0IRRI FOOD	IRRIGATION RATE= 1.12E+02 L/M**2/MON						
	NON-IRRIGATED FEED FRACTION= .00E+00						
	WATER FRACTION NOT VIA IRRIGATION= .00E+00						
	TOTAL 50 MILE GROW= 7.47E+08 KG/YR						
	TOTAL CROP IRRIGATION= 7.38E+06						
	CROP GROWING PERIOD= 6.00E+01 DAYS						
	CROP YIELD= 2.00E-01 KG/M**2						
	LOCATION	DILUTION	HARVEST	TRANSIT TIME			
veg		1.75E+02	7.38E+06	.00E+00			
0INDIVIDUAL CONSUMPTION RATES	ADULT=4.33E+01 KG TEEN=5.25E+01 CHILD=4.33E+01						
0POPULATION CONSUMPTION RATES	ADULT=1.58E+01 KG TEEN=2.00E+01 CHILD=1.66E+01						
1	*	*	*	IRRIGATED FOOD PATHWAY	*	*	*
LEAFY VEGE							
0	TOTAL 50-MILE-PRODUCTION POPULATION SERVED= 2.64E+06						
0	TOTAL POPULATION SERVED FROM IRRIGATED PRODUCTION= 1.89E+04						
0	INDIVIDUAL DOSES (MREM PER YEAR INTAKE)						
ADULT	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
	1.86E-02	2.54E-02	1.87E-02	7.80E-01	1.67E-02	2.67E-03	1.69E-01
TEENAGER	1.71E-02	2.26E-02	9.95E-03	6.32E-01	1.51E-02	2.68E-03	1.18E-01
CHILD	3.12E-02	2.89E-02	7.27E-03	9.54E-01	1.91E-02	3.08E-03	7.15E-02
0	NOTE- INDIVIDUAL DOSES CALCULATED WITH DILUTION= 1.75E+02 AND TRANSIT TIME= .00E+00 HRS.						
0	POPULATION DOSES (PERSON-REM)						
0*	*	*	*	*	*	*	*
0	NEPA DOSES						
ADULT	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
	1.16E-01	1.59E-01	1.17E-01	4.50E+00	1.03E-01	1.69E-02	1.07E+00
TEENAGER	1.71E-02	2.26E-02	9.94E-03	5.81E-01	1.49E-02	2.70E-03	1.18E-01
CHILD	3.95E-02	3.67E-02	9.13E-03	1.11E+00	2.39E-02	3.96E-03	9.13E-02
TOTAL	1.73E-01	2.19E-01	1.37E-01	6.19E+00	1.42E-01	2.36E-02	1.28E+00
0\$ \$	ALARA DOSES	\$ \$ \$					
0	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
ADULT	5.99E-02	8.20E-02	6.05E-02	2.32E+00	5.31E-02	8.71E-03	5.49E-01
TEENAGER	8.79E-03	1.17E-02	5.12E-03	2.99E-01	7.66E-03	1.39E-03	6.09E-02
CHILD	2.04E-02	1.89E-02	4.70E-03	5.74E-01	1.23E-02	2.04E-03	4.71E-02
TOTAL	8.91E-02	1.13E-01	7.03E-02	3.19E+00	7.31E-02	1.21E-02	6.57E-01
0IRRI FOOD	IRRIGATION RATE= 1.12E+02 L/M**2/MON						
	NON-IRRIGATED FEED FRACTION= .00E+00						
	WATER FRACTION NOT VIA IRRIGATION= .00E+00						
	TOTAL 50 MILE GROW= 1.08E+07 KG/YR						
	TOTAL CROP IRRIGATION= 4.00E+04						





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CROP GROWING PERIOD= 6.00E+01 DAYS									
CROP YIELD= 1.00E-03 KG/M**2									
LOCATION		DILUTION	HARVEST	TRANSIT TIME					
leafy		1.75E+02	4.00E+04	.00E+00					
OINDIVIDUAL CONSUMPTION RATES		ADULT=5.30E+00 KG	TEEN=3.50E+00	CHILD=2.20E+00	FOOD PROCESS TIME=2.40E+01 HR				
POPULATION CONSUMPTION RATES		ADULT=2.50E+00 KG	TEEN=1.70E+00	CHILD=8.30E-01	FOOD PROCESS TIME=4.80E+01 HR				
1	*	*	*	IRRIGATED FOOD PATHWAY	*	*	*	*	*
MILK									
0 TOTAL 50-MILE-PRODUCTION POPULATION SERVED= 2.64E+06									
0 TOTAL POPULATION SERVED FROM IRRIGATED PRODUCTION= 4.95E+04									
INDIVIDUAL DOSES (MREM PER YEAR INTAKE)									
		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	
ADULT		2.06E-03	1.38E-02	1.28E-02	7.36E-02	1.17E-02	1.06E-02	1.09E-02	
TEENAGER		3.67E-03	1.95E-02	1.58E-02	1.14E-01	1.58E-02	1.40E-02	1.41E-02	
CHILD		8.71E-03	3.14E-02	2.32E-02	2.20E-01	2.52E-02	2.22E-02	2.16E-02	
NOTE- INDIVIDUAL DOSES CALCULATED WITH DILUTION= 1.75E+02 AND TRANSIT TIME= .00E+00 HRS.									
0 POPULATION DOSES (PERSON-REM)									
0	*	*	*	*					
NEPA DOSES									
		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	
ADULT		2.53E-02	1.71E-01	1.59E-01	7.88E-01	1.45E-01	1.32E-01	1.35E-01	
TEENAGER		9.86E-03	5.28E-02	4.30E-02	2.64E-01	4.28E-02	3.82E-02	3.82E-02	
CHILD		3.95E-02	1.43E-01	1.06E-01	8.56E-01	1.15E-01	1.02E-01	9.90E-02	
TOTAL		7.46E-02	3.67E-01	3.08E-01	1.91E+00	3.03E-01	2.72E-01	2.72E-01	
0	\$	\$	\$	\$					
ALARA DOSES									
		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	
ADULT		9.19E-03	6.21E-02	5.78E-02	2.86E-01	5.26E-02	4.79E-02	4.91E-02	
TEENAGER		3.58E-03	1.92E-02	1.56E-02	9.60E-02	1.56E-02	1.39E-02	1.39E-02	
CHILD		1.43E-02	5.21E-02	3.86E-02	3.11E-01	4.17E-02	3.69E-02	3.60E-02	
TOTAL		2.71E-02	1.33E-01	1.12E-01	6.93E-01	1.10E-01	9.87E-02	9.90E-02	
IRRIGATION RATE= 1.12E+02 L/M**2/MON									
NON-IRRIGATED FEED FRACTION= .00E+00									
WATER FRACTION NOT VIA IRRIGATION= .00E+00									
TOTAL 50 MILE GROW= 9.50E+08 KG/YR									
TOTAL CROP IRRIGATION= 6.47E+06									
CROP GROWING PERIOD= 3.00E+01 DAYS									
CROP YIELD= 2.00E-01 KG/M**2									
INDIVIDUAL DOSES (MREM PER YEAR INTAKE)									
LOCATION		DILUTION	HARVEST	TRANSIT TIME					
milk		1.75E+02	6.47E+06	.00E+00					
OINDIVIDUAL CONSUMPTION RATES		ADULT=3.10E+02 KG	TEEN=4.00E+02	CHILD=3.30E+02	FOOD PROCESS TIME=4.80E+01 HR				
POPULATION CONSUMPTION RATES		ADULT=1.10E+02 KG	TEEN=2.00E+02	CHILD=1.70E+02	FOOD PROCESS TIME=9.60E+01 HR				
1	*	*	*	IRRIGATED FOOD PATHWAY	*	*	*	*	*
MEAT									
0 TOTAL 50-MILE-PRODUCTION POPULATION SERVED= 2.64E+06									
0 TOTAL POPULATION SERVED FROM IRRIGATED PRODUCTION= 4.76E+04									
INDIVIDUAL DOSES (MREM PER YEAR INTAKE)									
0									



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0		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
	ADULT	1.01E-02	4.60E-03	5.56E-03	9.00E-03	2.25E-02	3.73E-03	6.25E-01
	TEENAGER	8.53E-03	2.94E-03	3.51E-03	6.05E-03	1.80E-02	2.26E-03	3.90E-01
	CHILD	1.60E-02	3.61E-03	4.73E-03	8.49E-03	2.35E-02	2.73E-03	2.39E-01
0	NOTE- INDIVIDUAL DOSES CALCULATED WITH DILUTION= 1.75E+02 AND TRANSIT TIME= .00E+00 HRS.							
0	POPULATION DOSES (PERSON-REM)							
0	0*	*	*	*				
0		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
	ADULT	2.97E-01	1.34E-01	1.62E-01	2.63E-01	6.58E-01	1.09E-01	1.82E+01
	TEENAGER	4.06E-02	1.40E-02	1.67E-02	2.88E-02	8.58E-02	1.07E-02	1.85E+00
	CHILD	1.24E-01	2.80E-02	3.66E-02	6.57E-02	1.82E-01	2.11E-02	1.85E+00
	TOTAL	4.61E-01	1.76E-01	2.16E-01	3.57E-01	9.26E-01	1.41E-01	2.20E+01
0	0\$	\$	\$	\$				
0		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
	ADULT	2.51E-01	1.14E-01	1.37E-01	2.22E-01	5.57E-01	9.22E-02	1.54E+01
	TEENAGER	3.43E-02	1.18E-02	1.41E-02	2.43E-02	7.25E-02	9.08E-03	1.57E+00
	CHILD	1.05E-01	2.36E-02	3.10E-02	5.56E-02	1.54E-01	1.79E-02	1.56E+00
	TOTAL	3.90E-01	1.49E-01	1.82E-01	3.02E-01	7.83E-01	1.19E-01	1.86E+01
0	IRRIGATION RATE= 1.12E+02 L/M**2/MON							
0	NON-IRRIGATED FEED FRACTION= .00E+00							
0	WATER FRACTION NOT VIA IRRIGATION= .00E+00							
0	TOTAL 50 MILE GROW= 2.52E+08 KG/YR							
0	TOTAL CROP IRRIGATION= 3.84E+06							
0	CROP GROWING PERIOD= 3.00E+01 DAYS							
0	CROP YIELD= 8.30E-02 KG/M**2							
0	meat							
0	INDIVIDUAL CONSUMPTION RATES	ADULT=1.10E+02 KG		TEEN=6.50E+01		CHILD=4.10E+01		FOOD PROCESS TIME=4.80E+02 HR
0	POPULATION CONSUMPTION RATES	ADULT=9.50E+01 KG		TEEN=5.90E+01		CHILD=3.70E+01		FOOD PROCESS TIME=4.80E+02 HR
1	*	*	*	COST-BENEFIT ANALYSIS	*	*	*	
0	NUCLIDE	RELEASE	PERSON-REM DOSE	PERSON-REM PER CURIE				
		CI/YR	TOTAL BODY	THYROID	TOTAL BODY	THYROID		
1H	3	1.66E+03	3.05E-01	3.05E-01	1.83E-04	1.83E-04		
11NA	24	5.72E-03	8.81E-06	8.81E-06	1.54E-03	1.54E-03		
24CR	51	9.60E-04	3.51E-07	2.06E-07	3.65E-04	2.15E-04		
25MN	54	5.10E-04	9.02E-05	6.97E-08	1.77E-01	1.37E-04		
26FE	55	3.80E-04	1.14E-04	2.26E-12	2.99E-01	5.94E-09		
26FE	59	9.00E-05	1.48E-04	1.53E-08	1.65E+00	1.71E-04		
27CO	58	1.44E-03	6.06E-04	2.15E-07	4.21E-01	1.50E-04		
27CO	60	1.70E-04	2.59E-04	7.28E-08	1.52E+00	4.28E-04		
30ZN	65	1.60E-04	9.29E-04	1.59E-08	5.81E+00	9.94E-05		
74W	187	4.30E-04	4.66E-08	7.48E-12	1.08E-04	1.74E-08		
93NP	239	5.40E-04	8.17E-10	3.48E-10	1.51E-06	6.45E-07		
38SR	89	4.00E-05	4.99E-05	1.46E-11	1.25E+00	3.64E-07		
38SR	91	7.00E-05	2.15E-09	.00E+00	3.07E-05	.00E+00		
39Y	91M	5.00E-05	2.26E-31	.00E+00	4.53E-27	.00E+00		





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39Y	93	3.30E-04	4.34E-12	1.28E-17	1.31E-08	3.89E-14
40ZR	95	1.20E-04	3.44E-07	1.48E-08	2.87E-03	1.23E-04
41NB	99	9.00E-05	7.37E-07	9.29E-09	8.19E-03	1.03E-04
42MO	99	1.63E-03	2.64E-05	3.40E-09	1.62E-02	2.09E-06
43TC	99M	1.59E-03	1.54E-10	.00E+00	9.69E-08	.00E+00
44RU	103	2.34E-03	5.34E-04	1.57E-07	2.28E-01	6.73E-05
44RU	106	2.84E-02	4.79E-02	9.87E-07	1.69E+00	3.47E-05
47AG	110M	4.10E-04	2.04E-05	1.82E-07	4.98E-02	4.43E-04
52TE	129M	6.00E-05	7.20E-05	1.54E-04	1.20E+00	2.56E+00
52TE	129	4.00E-05	5.97E-23	1.85E-22	1.49E-18	4.62E-18
52TE	131M	2.90E-04	1.08E-06	2.04E-06	3.71E-03	7.04E-03
52TE	131	5.00E-05	1.94E-35	5.00E-35	3.87E-31	1.00E-30
53I	131	3.54E-02	7.08E-03	4.04E+00	2.00E-01	1.14E+02
52TE	132	4.50E-04	2.20E-05	2.59E-05	4.89E-02	5.76E-02
53I	132	1.14E-03	1.21E-13	1.20E-11	1.06E-10	1.05E-08
53I	133	4.21E-02	6.42E-05	3.09E-02	1.52E-03	7.34E-01
55CS	134	2.45E-03	1.01E-01	6.57E-07	4.12E+01	2.68E-04
53I	135	1.69E-02	1.41E-07	2.53E-05	8.32E-06	1.50E-03
55CS	136	2.90E-04	1.15E-03	5.87E-08	3.97E+00	2.02E-04
55CS	137	3.25E-03	7.98E-02	3.04E-07	2.46E+01	9.35E-05
56BA	140	3.93E-03	4.04E-04	9.36E-08	1.03E-01	2.38E-05
57LA	140	7.12E-03	3.68E-08	1.86E-08	5.16E-06	2.61E-06
58CE	141	5.00E-05	4.78E-09	4.70E-10	9.56E-05	9.40E-06
58CE	143	5.70E-04	4.92E-10	7.05E-11	8.64E-07	1.24E-07
59PR	143	5.00E-05	2.02E-09	4.04E-12	4.05E-05	8.08E-08
58CE	144	1.23E-03	5.84E-06	9.61E-09	4.75E-03	7.81E-06
59PR	144	1.23E-03	9.18E-39	.00E+00	7.46E-36	.00E+00
	TOTAL	5.45E-01	5.45E-01	4.38E+00		

0  
1  
1  
1  
1

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PNL VAX - OCTOBER 1985

12/05/17

```
1 0BAD VALUE GIVEN FOR CFS OR UML, MUST BE > 0.
  CFS = .00E+00 UML = 1.00E+00
1 LADTAP2 dayfile
  + AFL=0
  + IFL=0
  + JFL=0
  + OFL=0
  + EFL=1
  + getopts a:i:j:o: OPTION
  + IN4=11002
  + AFL=1
```





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```
+ getopts a:i:j:o: OPTION
+ IN1=ladtap2-BB-MEI-A.inp
+ IFL=1
+ getopts a:i:j:o: OPTION
+ IN2=ladtap2.lib
+ JFL=1
+ getopts a:i:j:o: OPTION
+ OU1=ladtap2-BB-MEI-A.out
+ OFL=1
+ getopts a:i:j:o: OPTION
+ [ 1 -eq 1 -a 1 -eq 1 -a 1 -eq 1 -a 1 -eq 1 ]
+ ERR=0
+ [ 0 -ne 0 ]
+ pwd
TDIR=/home/users14/cnaugle/BBNPP/LADTAP-II
+ RUND=/tmp/ladtap2.11034
+ mkdir /tmp/ladtap2.11034
+ cd /tmp/ladtap2.11034
+ ln -s /home/users14/cnaugle/BBNPP/LADTAP-II/ladtap2-BB-MEI-A.inp ftn09
+ ln -s /home/users14/cnaugle/BBNPP/LADTAP-II/ladtap2.lib ftn20
+ . /SCL/scladmin/sclproc
+ sclproc ladtap2
+ l> ladtap2.ban
+ whence ladtap2
+ timex /SCL/ladtap2/ladtap2.e
+ l> ftn16

real    0.17
user    0.05
sys     0.02

+ STATUS=0
+ echo 1
+ l> /home/users14/cnaugle/BBNPP/LADTAP-II/ladtap2-BB-MEI-A.out
+ cat ladtap2.ban
+ l>> /home/users14/cnaugle/BBNPP/LADTAP-II/ladtap2-BB-MEI-A.out
+ cat ftn16
+ l>> /home/users14/cnaugle/BBNPP/LADTAP-II/ladtap2-BB-MEI-A.out
+ copysbf /home/users14/cnaugle/BBNPP/LADTAP-II/dayladtap2.11002 out2 LADTAP2 dayfile
```

### A.2.2.1 Annual Mean

```

1
**
** AREVA NP SOFTWARE CONTROL LIBRARY
**
**
** SCL ITEM : ladtap2
** SCL FILE : /SCL/ladtap2/ladtap2.e
** SCL VER/MOD LEVEL : 01 / 00
** DESCRIPTION : Program ladtap2
**
**
** INSTALLED DATE : 02/11/08
** SAFETY CODE : N
** VALIDATION DOC. # : 32-9062452-000
** CODE SPONSOR : MESSIER THEODORE A.
** TODAY'S DATE : 05/17/12
** CURRENT TIME : 05:59:08 PDT
**
**
** HP-UX eng2002 B.11.11 U 9000/800 1402689151 u
**

```

L	AAA	DDDD	TTTTT	AAA	PPPPP	IIIII	IIIII
L	A	A	D	D	A	P	I
L	A	A	D	D	A	P	I



Annual Offsite Dose to Individuals and Populations from Liquid Effluent Releases from the U.S. EPR at BBNPP

\* \* \* \* \*

L AAAAA D D T AAAAA PPPP I I I

L A A D D T A A P I I

LLLLL A A DDDD T A A P IIIII IIIII

\* \* \* \* \*

EVALUATION OF RADIATION DOSES FROM RELEASES OF RADIOACTIVITY

IN NUCLEAR POWER PLANTS LIQUID EFFLUENTS

REVISION DATE: PNL VAX - OCTOBER 1985

\* \* \* \* \*

11 Bend NPP Unit 3 New Population Liquid Dose \*\*\*\*\*

\* \* \* \* \*

RADIOLOGICAL ASSESSMENT BRANCH

DIVISION OF SYSTEMS INTEGRATION

U. S. NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C.

DATE OF RUN: 12/05/17

\* \* \* \* \*

1 11 Bend NPP Unit 3 New Population Liquid Dose \*\*\*\*\*

0 DISCHARGE=1.93E+01 CFS SOURCE TERM MULTIPLIER=1.00E+00

0 50-MILE POPULATION=2.64E+06 FRACTION --- ADULT= .71

TEENAGER= .11

CHILD= .18

0 FRESHWATER SITE

1

Revised GALE Liquid Source Term

PROBLEM IDENTIFYING RADIONUCLIDE RH 103M 2.34E-03

PROBLEM IDENTIFYING RADIONUCLIDE RH 106 2.84E-02

PROBLEM IDENTIFYING RADIONUCLIDE AG 110 5.00E-05

PROBLEM IDENTIFYING RADIONUCLIDE BA 137M 3.04E-03

NO INTERNAL RECONCENTRATION MODEL EMPLOYED

0 \* \* \* ADULT DOSE FACTORS \* \* \*

0 INGESTION DOSE FACTORS \_\_\_\_\_ SHORELINE \_\_\_\_\_