

TABLE 11.3-1

(Historical Information)

ESTIMATED ANNUAL GASEOUS RELEASE BY ISOTOPE(1)  
FROM GAS DECAY TANKS

(Per Unit)

<u>Isotope</u>	<u>Activity Release to Environment Curies/yr</u>
Kr 85	5450
Kr 85m, 87, 88	Negligible
Xe 133	2000
Xe 133m, 135, 135m 138	<u>Negligible</u>
Total	7450

NOTE:

(1) Based on 1 percent defective fuel, 3423 Mwt core, load follow and 45 days holdup.

TABLE 11.3-2

(Historical Information)

ESTIMATED TOTAL RADIOACTIVE GASEOUS RELEASES  
(TWO UNIT BASIS)

<u>Isotope</u>	<u>Estimated Annual Release (Curies)</u>
H-3	248
Kr-85	11450
Kr-85m	195
Kr-87	113
Kr-88	309
Xe-133	26850
Xe-133m	240
Xe-135	633
Xe-135m	10
I-131	0.23

TABLE 11.3-3

**(Historical Information)**ESTIMATED OFF-SITE RADIATION EXPOSURES  
GASEOUS RADIOACTIVE RELEASES

(Two Unit Basis)

Isotope	Annual Release (Curies)	Radiation Exposure (mrem) at 1270 Meters, North Sector		
		Finite Cloud* Whole Body Dose (mrem)	Semi-Infinite Cloud(1) Whole Body Dose (mrem)	Infinite Cloud(2) Skin Dose (mrem)
H-3	248	0	0	0.0007
Kr-85	11450	0.0033	0.012	1.12
Kr-85m	195	0.0039	0.008	0.023
Kr-87	113	0.0059	0.046	0.073
Kr-88	309	0.058	0.15	0.053
Xe-133	26850	0.227	0.55	1.94
Xe-133m	240	0.0062	0.0016	0.023
Xe-135	633	0.017	0.042	0.087
Xe-135m	10	0.0003	0.0011	0.0004
I-131	0.23	negl	negl	negl
Totals	40,000	0.269	0.81	3.32

NOTES:

- (1) gamma energy  
(2) beta energy

TABLE 11.3-4

## (Historical Information)

## POTENTIAL RADIATION EXPOSURE PATHWAYS TO MAN (GASEOUS)

<u>Pathway</u>	<u>Individual Assumed Exposed</u>	<u>Calculated Exposure</u>
External Exposure	Individual stands at nearest site boundary 100 percent of time	0.054 mrem/yr (whole body- finite cloud)
		0.16 mrem/yr (whole body- semi - infinite cloud)
		0.66 mrem/yr (skin - infinite cloud, beta energy only)
Ingestion of Milk	Young child drinks entire intake of milk from nearby dairy farms. Cows assumed to graze 9 months per year with grass making up to 100 percent of diet during that time.	0.26 mrem/yr (farm 4.1 miles NW of site)