

## 5.0 LIQUID WASTE TREATMENT SYSTEM

### 5.1 OPERABILITY

The Liquid Waste Treatment System as described in Section 11 of the Final Safety Analysis Report is considered to be operable when one of each of the following pieces of equipment is available to perform its intended function:

- a) Miscellaneous Waste Evaporator (WDL-Z1B) or Reactor Coolant Evaporator (WDL-Z1A)
- b) Waste Evaporator Condensate Demineralizer (WDL-K3 A or B)
- c) Waste Evaporator Condensate Storage Tank (WDL-T 11 A or B)
- d) Evaporator Condensate Pumps (WDL-P 14 A or B)

### 5.2 REPRESENTATIVE SAMPLING PRIOR TO DISCHARGE

All liquid releases from the Liquid Waste Treatment System are made through the Waste Evaporator Condensate Storage Tanks. To provide thorough mixing and a representative sample, the contents of the tank are recirculated using one of the Waste Evaporator Condensate Transfer Pumps.

## 6.0 GASEOUS WASTE TREATMENT SYSTEM

### 6.1 OPERABILITY

Operability of the Gaseous Waste Treatment System is defined as the ability to remove gas from the vent header/tank gas spaces and store it under a higher pressure in the Waste Gas Decay Tanks for subsequent release.

7.0 SOLID WASTE MANAGMENT SYSTEM - PROCESS CONTROL PROGRAM

(The Process Control Program is available as a separate document,  
see LIL 133, dated June 24, 1981.)

## 8.0 ENVIRONMENTAL MONITORING INFORMATION

The Radiological Environmental Monitoring Program shall be conducted as outlined in Section 3.23, Table 3.23.1 of Amendment 72 to the TMINS Unit 1 Technical Specifications. Sampling locations will be as indicated in Tables 1-7 of this document.

Table A-5

## PATHWAY DOSE FACTORS DUE TO RADIOISOTOPES OTHER THAN NOBLE GASES\*

Radio-nuclide	Inhalation Pathway $\text{Pa}_{R1}$ (mrem/yr) per $\mu\text{Ci}/\text{m}^3$	Heat Pathway $\text{Pa}_{R1}$ ( $10^2$ mrem/yr per $\mu\text{Ci}/\text{sec}$ )	Ground Plane Pathway $\text{Pa}_{R1}$ ( $10^2$ mrem/yr per $\mu\text{Ci}/\text{sec}$ )	Cow-Milk-Infant Pathway $\text{Pa}_{R1}$ ( $10^2$ mrem/yr per $\mu\text{Ci}/\text{sec}$ )	Leafy Vegetables Pathway $\text{Pa}_{R1}$ ( $10^2$ mrem/yr per $\mu\text{Ci}/\text{sec}$ )
H-3	1.12E 03	2.33E 02	0.	2.38E 03	4.00 E3
CR-51	1.70E 04	4.98E 05	5.31E 06	5.75E 06	7.40 E6
HR-54	1.57E 06	7.60E 06	1.56E 09	3.70E 07	7.79 E8
FE-59	1.27E 06	6.49E 08	3.09E 08	4.01E 08	7.85 E8
CO-58	1.10E 06	9.49E 07	4.27E 08	7.01E 07	4.37 E8
CO-60	7.06E 06	3.61E 08	2.44E 10	2.25E 08	2.48 E9
ZH-65	9.94E 05	1.05E 09	8.28E 08	1.99E 10	3.13 E9
SR-89	2.15E 06	4.89E 08	2.42E 04	1.28E 10	4.23 E10
SR-90	1.01E 08	1.01E 10	0.	1.19E 10	1.61 E12
ZR-95	2.23E 06	6.09E 08	2.73E 08	8.76E 05	1.03 E9
I-131	1.62E 07	2.60E 09	1.01E 07	4.95E 11	2.29 E10
I-133	3.84E 06	6.45E 01	1.43E 06	4.62E 09	3.91 E8
CS-134	1.01E 06	1.42E 09	7.70E 09	6.37E 10	3.05 E10
CS-136	1.71E 05	5.06E 07	1.64E 03	6.61E 09	2.71 E8
CS-137	9.05E 05	1.27E 09	1.15E 10	5.75E 10	2.94 E10
BA-140	1.74E 06	5.00E 07	2.26E 07	2.75E 08	3.32 E8
CE-144	5.43E 05	1.45E 07	1.48E 07	1.43E 07	4.82 E8

\*Additional dose factors for isotopes not included in Table 9 may be calculated using the methodology described in NUREG-0133.