

CALCULATION NO.: QDC 9400-M-0550 Rev. 0

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1. PURPOSE/OBJECTIVE

The purpose of this calculation is to determine the control room and offsite doses due to a control rod drop accident (CRDA) assuming that the main steam line radiation monitors (MSLRM) no longer provide a signal for automatic closure of the main steam line isolation valves (MSIVs). This calculation is to support Technical Specifications changes and updated final safety analysis report (UFSAR) revisions on the elimination of the need for automatic closure of MSIVs on high MSLRM signals. [5.1, 5.2]

2. METHODOLOGY AND ACCEPTANCE CRITERIA

2.1. METHODOLOGY

2.1.1. General Information

This calculation was based on the methods established in §15.4.9 of the Standard Review Plan (SRP). [5.3] The methodology used is consistent with that used by Bechtel Power Corporation on performing similar analysis for the Dresden Nuclear Plant, which is similar in design to Quad Cities. [5.4] The radiological consequences of a CRDA to the control room operators and the offsite population were assessed with the SCIENTECH-NUS "AXIDENT" computer code which is a transient control room and site boundary dose analysis code. [5.5] The AXIDENT program was executed on a Dell Inspiron 3000 computer running a Windows NT Version 4.0 operating system as currently assigned to Harry Wagage (owned by Matrix Leasing, no. 210158). Satisfactory operation of the AXIDENT code on this computer has been confirmed by revalidation. [5.6] There have been no hardware or software changes since this revalidation and therefore the verification/baseline is still valid.

In the 1991 time frame, the BWR Owner's Group requested permission from the NRC to eliminate MSIV automatic closure function and scram function of the MSLRM. The MSLRM provided protection from a CRDA by isolating the MSIVs and thus limiting the quantity of activity released.

General Electric documented the generic safety evaluation of eliminating the MSIV action on high radiation alarm in NEDO 31400A which has been accepted by the NRC for reference in licensing applications. [5.7]

2.1.2. Source Term

A source term for activity to be released was developed based on the guidelines of NEDO 31400A, which is for a generic plant, SRP 15.4.9, and plant specific data for Quad Cities. [5.7,

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5.3] A model to evaluate the CRDA was developed to include source term contributions from the main steam line and the gland steam line, their leakage paths and release points. The total radioactive inventory of the core was calculated based on TID 14844 methodology and Siemens 20 and 60 GWd/MTU fuels. [5.8, 5.9]

The source term derived from TID-14844, which was published in 1962, is referred in this report as the TID source term. [5.8] The TID source term is expressed as curies per MWt and reflects fission product yields of U-235 for low burnup fuels as was the case in the 1960s. With the advent of higher burnup fuel (i.e. greater than 35,000 MW days per ton), plutonium fission becomes important. The fission product yields of Pu-239 are different from the U-235 yields. As the contribution of Pu-239 increases, the core fission product inventories change from that initially dominated by U-235 fission. This change is evident in the Siemens fission product inventories included in reference 5.9 for burnup of 20,000, 40,000 and 60,000 MW days per ton. [5.9]

The source term that is used in the AXIDENT code was calculated using equation 1, which accounts for various source term reduction/enhance mechanisms and compensates for the automatic reduction of iodine isotopes in the code.

$$Q_{in} = f_n Q_{cn} \quad (1)$$

where

$$f_n = f_{ff} f_g f_p f_{cn} f_{rn} f_{an} \quad (2)$$

where

Q_{in}	Activity of isotope n, which is input to the code
f_{ff}	Fuel-specific fraction of failed fuel in the core following the CRDA
F_g	Fraction of activity of the fuel that is available for release from the gap
F_p	Power peaking factor of the core
f_{cn}	Fraction of activity of isotope n in the coolant which is transported to the condenser
f_{rn}	Fraction of activity of isotope n in the condenser which is available for release
f_{an}	Factor for isotope n to compensate for automatic reduction in the AXIDENT code
Q_{cn}	Activity of isotope n that is available in the core

2.1.3. Dose Conversion Factors for Thyroid from Inhalation of Iodine

The existing licensing basis accident analysis is based on the dose conversion factors (DCF's), which were referenced in Regulatory Guide 1.3 and TID-14844. [5.14, 5.8] The basis was ICRP Publication 2, which was published, in the early 1960's. [5.16] Since the publishing of ICRP-2, work has been and continues to be performed in both the U.S. and overseas on developing new

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DCF's. Regulatory Guide 1.109 recommends DCF's that are significantly lower than those recommended do in Regulatory Guide 1.3 or TID-14844. [5.15, 5.14, 5.8] ICRP Publication 30 issued in 1979 provides even lower DCF's. [5.13] The DCF's based on ICRP-30 have been collected and "processed" and are conveniently published in Federal Guidance Report-11. [5.17] Although ICRP-30 DCF's have not been included in a regulatory guide for use in accident analyses, they have been submitted and approved by NRC in a number of Post-TMI Control Room Habitability analyses. Table 1 compares DCF's for iodine isotopes from different sources.

This analysis used the ICRP 2 DCF's to calculate thyroid doses. The thyroid doses, which were calculated using ICRP 30 DCF's are given for information.

Table 1. Thyroid Dose Conversion Factors for Inhalation of Iodine, rem per curie inhaled

Isotope	Dose Conversion Factor (rem/Ci)		
	ICRP 2 [5.16, 5.8]	RG 1.109 [5.15]	ICRP 30 [5.13, 5.17]
I-131	1.48E+6	1.49E+6	1.10E+6
I-132	5.35E+4	1.43E+4	6.30E+3
I-133	4.00E+5	2.69E+5	1.80E+5
I-134	2.50E+4	3.73E+3	1.10E+3
I-135	1.24E+5	5.60E+4	3.10E+4

2.1.4. CRDA Model

The plant has been configured so that the main steam isolation valves do not close on high radiation in the main steam line. Two release paths, 1) main steam to the turbine/condenser and 2) gland seal steam to the gland steam condenser were considered. The mechanical vacuum pumps (MVP's) are assumed to operate until they are isolated on a high radiation signal from the MSLRM.¹ All the release from the main steam condenser was assumed to pass through MVP's without being filtered. After isolation of the MVP's, all the release from the main steam condenser was assumed to pass through filters of the augmented offgas system.

¹ The MSLRM trip function for the mechanical vacuum pump is not impacted by the proposed change.

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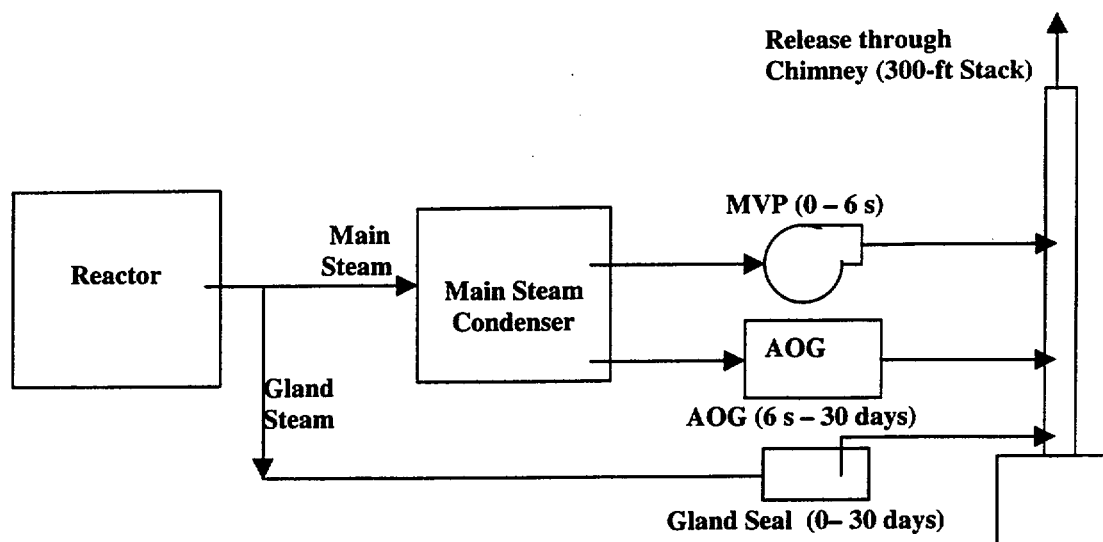


Figure 1. Schematic diagram of radioactivity release flow paths

2.2. ACCEPTANCE CRITERIA

This analysis is intended to confirm that the calculated doses resulting from a design basis CRDA for the control room operator, a person at the EAB, and a person at the LPZ are less than the regulatory dose limits as given in table 2.

Table 2. Regulatory Dose Limits

Dose Type	Control Room (rem)	EAB and LPZ (rem)
Thyroid Dose	30 ^a	75 ^b
Whole Body Dose	5 ^a	6 ^b
Beta Skin Dose	30 ^a	-

Notes: ^a SRP, Section 6.4, Acceptance Criteria-6 [5.3]

^b SRP 15.4.9 [5.3]

3. ASSUMPTIONS/ENGINEERING JUDGEMENTS

- 3.1 The steam jet air ejectors are in operation and all leakage from the main condenser passes through to the augmented off gas system for ultimate release from the plant stack. (NEDO 31400A, § 6.1) [5.7]
- 3.2 The augmented off gas system removes all Iodides from the flow passing through the system from the condenser. (Basis: The augmented off gas system has deep bed charcoal filters which are very efficient at iodine removal.)

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- 3.3 Coincident Loss of power occurs at time of accident. (SRP 15.4.9 Appendix A, III-1) [5.3]
- 3.4 No fuel melting would occur at Quad Cities during a CRDA. (Quad Cities UFSAR 15.4.10.5 [5.2])
- 3.5 Since no fuel melting would occur the only release from the fuel rods is a gap release. 10% of the noble gas inventory and 10% of the radioiodine inventory will be released from the fuel to the reactor coolant during the gap release. (Regulatory Guide 1.77; SRP 15.4.9 Appendix A, III-5) [5.10, 5.3]
- 3.6 As in NEDO-31400A, the CRDA is assumed to result in the failure of 850 fuel rods. [5.7] The peaking factor is 1.5. [5.3]
- 3.7 Core 102% power was used to account for uncertainty in the core power level.
- 3.8 Gap activity from failed fuel is assumed to mix instantaneously with the reactor coolant. (SRP 15.4.9 Appendix A, III-8) [5.3]
- 3.9 Ten per cent of all iodides and 100% of all noble gases are transported to the turbine/condenser. (SRP 15.4.9 Appendix A, III-9) [5.3]
- 3.10 100% of all noble gases are available for release from the turbine condenser. (SRP 15.4.9 Appendix A, III-10) [5.3]
- 3.11 90% of all iodine isotopes plate out leaving only 10% in the gaseous form available for release from the turbine condenser. (SRP 15.4.9 Appendix A, III-11) [5.3] Note: This assumption not used for release to the AOG system since all iodine isotopes would be trapped in the deep bed charcoal filters.
- 3.12 The main steam turbine condenser leaks to the atmosphere for 24 hours. (SRP 15.4.9 Appendix A, III-10) [5.3]
- 3.13 No credit had been taken for decay due to hold up in the gland steam condenser. (SRP 15.4.9 Appendix A, III-13) [5.3]
- 3.14 Atmospheric dispersion factors, breathing rates and dose conversion factors are the same as those use in the dose calculation for loss of coolant accident. (SRP 15.4.9 Appendix A, III-14) [5.3] Note: These parameters are given in references 5.11 and 5.12.
- 3.15 The reactor scrams in six seconds with reduction of steam flow. MVPs also will be isolated at the same time.
- 3.16 Steam flow rate after initiation of CRDA is 5% of its full power value.
- 3.17 Before the MVPs are isolated all exhaust from the main steam condenser was assumed to release bypassing the AOG.
- 3.18 After the MVPs are isolated all exhaust from the main steam condenser was assumed to release through the AOG.
- 3.19 The exhaust rate from the main steam condenser was assumed to be 100% per day. This is conservative because this would amount to about 64 scfm, which is higher than expected following the scram. Plus we would still have an active SJAE isolation.

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4. DESIGN INPUT**4.1. Source Term Data****4.1.1. TID Source Term**

▪ Total number fuel assemblies in the core	724
▪ Number of fuel rods per fuel assembly (8x8 fuel assembly) ²	63
• Iodine Fractions (Reg. Guide 1.3) [5.14]	
Organic	0.04
Elemental	0.91
Particulate	0.05

4.1.2. Siemens Fuel Source Term [5.9]

▪ Number of fuel assemblies in the core	724
▪ Number of fuel rods per fuel assembly	72
▪ MW/MTU	22.0
▪ MTU/core	121.632
▪ Burnup (GWd/MTU)	20 60
▪ Core Residence Times (days)	909 2727
▪ Core isotope inventory for Siemens 20 GWd /MTU fuel (2676 MWt core)	Table 3
▪ Core isotope inventory for Siemens 60 GWd/MTU fuel (2676 MWt core)	Table 3

² 850 failed rods bounds the 8X8 and 9X9 fuel per the UFSAR 15.4.10.4.

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4.2. Plant Data

Some of the input data were obtained from the Dresden Nuclear Power Plant because they were readily available in reference 5.4. Due to similarities of the plants, it is acceptable to use the Dresden inputs and references.

- Flow rate of main steam [5.4] 9.7006E6 lb/hr
(Note that the above value of main steam flow, which was obtained from Dresden, is 0.6% lower than that at Quad Cities (9.759E6 lb/hr). The impact of this difference on results is negligible and is well compensated by the other conservatisms used in the calculation.)
- Flow rate of gland steam [5.4] 1.50E4 lb/hr
- Specific volume of steam [5.4] 0.445 ft³/lb
- Volume of primary system (MSL and dome) 5,000 ft³
(Conservatively reduced from 8,431 ft³) [5.4]
- Design flow rate of MVP (UFSAR 15.4.10.5) [5.2] 5,000 ft³/min
- Time of isolation of MVP 6 s
- Free volume of the condenser (UFSAR 15.4.10.5) [5.2] 92,000 ft³
- Volume of water in the condenser (UFSAR 15.4.10.5) [5.2] 11,000 ft³
- Delay to reactor scram (UFSAR 15.4.10.3) [5.2] 6 s
- Power Level, MWt 2561
(UFSAR 15.4.10.5, SRP 15.5.4 [5.2, 5.3] - (2511 x 1.02))

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Table 3. Core Isotope Inventory for Siemens 20 and 60 GWd/MTU Fuels [5.9]

Isotope	Activity (Ci/Core)	
	20 GWd/MTU	60 GWd/MTU
I-131	7.22E7	7.94E7
I-132	1.04E8	1.11E8
I-133	1.45E8	1.41E8
I-134	1.68E8	1.58E8
I-135	1.30E8	1.24E8
Xe-131m	5.16E5	6.70E5
Xe-133m	3.49E6	3.47E6
Xe-133	1.45E8	1.42E8
Xe-135m	3.93E7	3.79E7
Xe-135	4.78E7	3.52E7
Xe-137	1.37E8	1.40E8
Xe-138	1.31E8	1.35E8
Kr-83m	7.78E6	3.58E6
Kr-85m	2.13E7	1.37E7
Kr-85	9.73E5	1.95E6
Kr-87	4.18E7	2.57E7
Kr-88	6.05E7	3.81E7
Kr-89	7.67E7	4.65E7

4.3. Atmospheric Dispersion Factors

Table 4 gives the atmospheric dispersion factors, which were used in the calculation.

Table 4. Atmospheric Dispersion Factors for Stack Release

Location	Duration	$\frac{\chi}{Q}$ (s/m ³)	Reference
EAB	0 – ½ hr	2.9E-4	Calc. QDC-7500-M-0387 [5.11]
	½ – 2 hr	2.3E-5	
LPZ	0 – ½ hr	3.2E-5	Calc. QDC-7500-M-0387 [5.11]
	½ – 8 hr	9.0E-6	
	8 – 24 hr	3.0E-6	
Control Room	0 – 2 hr	7.00E-4	Calc. QDC-9400-M-0363 [5.12]
	2 – 8 hr	6.45E-6	
	8 – 24 hr	3.81E-6	

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5. REFERENCES

- 5.1 Quad Cities Technical Specifications:
 - Basis Section 2.2.A. Reactor Protection System Instruments Set Points
 - Table 2.2.A-1. Reactor Protection System Instruments Set Points
 - Table 3.1.A-1. Reactor Protection System Instruments
 - Table 3.2.A-1. Isolation Actuation Instrumentation
 - Table 4.1.A-1. Reactor Protecting System Instruments Surveillance Requirements
 - Table 4.2.A-1. Isolation Actuation Instrumentation Surveillance Requirements
- 5.2 Quad Cities UFSAR.
- 5.3 NUREG-0800, Standard Review Plan, Rev. 2, July 1981:
 - Section 6.4, "Control Room Habitability Systems,"
 - Section 15.4.9, Radiological Consequences of Control Rod Drop Accident (BWR), Appendix A
- 5.4 Bechtel Power Corporation, "Control Rod Drop Accident/ MSLRM Removal," DR-357-M-004, Revision 0, 3/1/96.
- 5.5 HALLIBURTON NUS "AXIDENT, A Digital Computer Dose Calculation Model," Version 2, Mod 4, dated 2/18/92.
- 5.6 Software Verification Memo from H. Wagage to T. Bladen dated 7/8/98.
- 5.7 General Electric Company, "Safety Evaluation for Eliminating the boiling Water Reactor Main Steam Isolation Valve Closure Function and Scram Function of the Main Steam Line Radiation Monitor," NEDO 31400A, October 1992.
- 5.8 TID-14844, Calculation of Distance Factors for Power and Test Reactor Sites, U.S. Atomic Energy Commission Technical Information Document, March 23, 1962
- 5.9 Siemens Letter, JHR:96:188, from J. H. Riddle (Siemens) to Ronald J. Chin (Commonwealth Edison) on "Radioactive Release Analysis Source Term Values," May 20, 1996.
- 5.10 U.S. NRC Regulatory Guide 1.77, "Assumptions Used for Evaluating a Control Rod Ejection Accident for Pressurized Water Reactors," 5/1/74
- 5.11 QDC-9400-M-0363, "Quad Cities Control Room Habitability with Revised Dose Analysis Methodology," Revision 1, August 1998.
- 5.12 Calculation QDC 7500-M-0387, "Quad Cities EAB and LPZ LOCA Doses with Revised Dose Analysis Methodology," Revision 1, August 1998.
- 5.13 ICRP Publication 30, "Limits for Intakes of Radionuclides by Workers," 1979.
- 5.14 Regulatory Guide 1.3, Assumptions Used For Evaluating The Potential Radiological Consequences of a Loss of Coolant Accident for Boiling Water Reactors, Revision 2, June 1974.
- 5.15 Regulatory Guide 1.109, "Calculation of Annual Doses to Man from Radioactive Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR 50 Appendix I," Revision 1, 1977.

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- 5.16 ICRP Publication 2, "Report of Committee II, Permissible Dose for Internal Radiation," 1959.
- 5.17 Federal Guidance Report No. 11, Sept 1988.

6. CALCULATION

6.1. Source Term

The radioactive inventory in the core for the TID source term was calculated by running the accident code as given in attachment 1. The calculated inventories are listed in table 5. The fractional release for iodine and noble gas groups were calculated using equation 2 and listed in table 6. Table 6 also lists the factors used for the calculation. The fraction of failed fuel in the core following the CRDA for TID source term as given in table 6 was calculated as follows:

$$f_{ff\ TID} = \frac{(850\ rods\ failed)}{(724\ fuel\ assemblies\ per\ core)(63\ rods\ per\ fuel\ assembly)}$$
$$= 0.0186$$

$$f_{ff\ Siemens} = \frac{(850\ rods\ failed)}{(724\ fuel\ assemblies\ per\ core)(72\ rods\ per\ fuel\ assembly)}$$
$$= 0.0163$$

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Table 5. Core Inventory and Source Terms Used for the AXIDENT Code Input for TID-14844 Source Term and Siemens Fuels [5.8, 5.9]

Isotope	TID-14844 fission products		Siemens Fuel					
	Core Inventory (Ci)*	AXIDENT Input (Ci)	20 GWd/MTU			60 GWd/MTU		
			Core Inventory (Ci)		AXIDENT Input (Ci)	Core Inventory (Ci)		AXIDENT Input (Ci)
			2676 MWt [5.9]	2561 MWt		2676 MWt [5.9]	2561 MWt	
I-131	6.446E+7	7.16E+3	7.22E+7	6.91E+7	6.76E+3	7.94E7	7.60E+7	7.43E+3
I-132	9.592E+7	1.06E+4	1.04E+8	9.95E+7	9.73E+3	1.11E8	1.06E+8	1.04E+4
I-133	1.482E+8	1.65E+4	1.45E+8	1.39E+8	1.36E+4	1.41E8	1.35E+8	1.32E+4
I-134	1.728E+8	1.92E+4	1.68E+8	1.61E+8	1.57E+4	1.58E8	1.51E+8	1.48E+4
I-135	1.373E+8	1.52E+4	1.30E+8	1.24E+8	1.22E+4	1.24E8	1.19E+8	1.16E+4
XE-131M	4.874E+5	1.36E+3	5.16E+5	4.94E+5	1.21E+3	6.70E5	6.41E+5	1.57E+3
XE-133M	3.766E+6	1.05E+4	3.49E+6	3.34E+6	8.18E+3	3.47E6	3.32E+6	8.14E+3
XE-133	1.482E+8	4.13E+5	1.45E+8	1.39E+8	3.40E+5	1.42E8	1.36E+8	3.33E+5
XE-135M	3.987E+7	1.11E+5	3.93E+7	3.76E+7	9.21E+4	3.79E7	3.63E+7	8.89E+4
XE-135	1.396E+8	3.89E+5	4.78E+7	4.57E+7	1.12E+5	3.52E7	3.37E+7	8.25E+4
XE-138	1.307E+8	3.65E+5	1.31E+8	1.25E+8	3.07E+5	1.35E8	1.29E+8	3.17E+5
KR-83M	1.152E+7	3.21E+4	7.78E+6	7.45E+6	1.82E+4	3.58E6	3.43E+6	8.39E+3
KR-85M	2.880E+7	8.04E+4	2.13E+7	2.04E+7	4.99E+4	1.37E7	1.31E+7	3.21E+4
KR-85	9.665E+5	2.70E+3	9.73E+5	9.31E+5	2.28E+3	1.95E6	1.87E+6	4.57E+3
KR-87	5.538E+7	1.55E+5	4.18E+7	4.00E+7	9.80E+4	2.57E7	2.46E+7	6.03E+4
KR-88	7.886E+7	2.20E+5	6.05E7	5.79E+7	1.42E+5	3.81E7	3.65E+7	8.93E+4

* Note: Core inventory was calculated by AXIDENT code using TID-14844 methodology. [5.5, 5.8]

Table 6. Factors Used to Calculate Fractional Release for Iodine and Noble Gas Groups

Factor		Iodine	Noble Gas
Fuel-specific fraction of failed fuel in the core following the CRDA	f_{ff} TID-14844 fission products Siemens Fuel	0.0186	
Fraction of activity of the fuel that is available for release from the gap	f_g	0.1	
Power peaking factor of the core	f_p	1.5	
Fraction of activity of isotope n in the coolant which is transported to the condenser	f_{cn}	0.1	1
Fraction of activity of isotope n in the condenser which is available for release	f_{rn}	0.1	1
Factor for isotope n to compensate for automatic reduction in the AXIDENT code	f_{an}	4	1
Resultant Factor	f_n TID-14844 fission products Siemens Fuel	1.11E-4 9.78E-5	2.79E-3 2.45E-3

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6.2. Source Term Release Data**6.2.1. Primary Leakage**

The primary leakage rate for main steam at full power is calculated as follows:

$$\begin{aligned} \text{primary leakage main steam} &= \frac{\text{steam volume flow}}{\text{steam volume}} \\ &= \frac{\left(9.7006E6 \frac{\text{lb}}{\text{h}}\right) \left(0.445 \frac{\text{ft}^3}{\text{lb}}\right) \left(\frac{1 \text{ s}}{3600 \text{ h}}\right)}{5000 \text{ ft}^3} \\ &= 0.2398 \text{ s}^{-1} \end{aligned}$$

The primary leakage rate for gland steam at full power is calculated as follows:

$$\begin{aligned} \text{primary leakage gland steam} &= \frac{\text{steam volume flow}}{\text{steam volume}} \\ &= \frac{\left(1.500E4 \frac{\text{lb}}{\text{h}}\right) \left(0.445 \frac{\text{ft}^3}{\text{lb}}\right) \left(\frac{1 \text{ s}}{3600 \text{ h}}\right)}{5000 \text{ ft}^3} \\ &= 3.708E-4 \text{ s}^{-1} \end{aligned}$$

$$\begin{aligned} \text{Total primary leakage at full power} &= (0.2398 + 3.708E-4) \text{ s}^{-1} \\ &= 0.24017 \text{ s}^{-1} \end{aligned}$$

$$\begin{aligned} \text{The fraction of primary leakage through the main steam line} &= (0.2398 \text{ s}^{-1}) / (0.24017 \text{ s}^{-1}) \\ &= 0.99846 \end{aligned}$$

$$\begin{aligned} \text{The fraction of primary leakage through the gland line} &= (3.708E-4 \text{ s}^{-1}) / (0.24017 \text{ s}^{-1}) \\ &= 1.544E-3 \end{aligned}$$

After reactor scram at 6 seconds the steam flow is reduced to 5% of its full power value. The primary leakage rate for main steam after reactor scram is calculated as follows:

$$\text{primary leakage} = 0.05 * 0.2398 \text{ sec}^{-1} = 1.199E-2 \text{ s}^{-1}$$

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The primary leakage rate for gland steam after reactor scram is calculated as follows:

$$\text{primary leakage} = 0.05 * 3.708E-4 \text{ s}^{-1} = 1.854E-5 \text{ s}^{-1}$$

$$\text{Total primary leakage rate after reactor scram} = (1.199E-2 + 1.854E-5) \text{ s}^{-1} = 1.201E-2 \text{ s}^{-1}$$

The primary leak rate terminates at 24 hours after the event.

6.2.2. Secondary Leakage

The secondary leakage is the rate at which activity is transported from the condenser to the release point expressed in volumes per second. The release point for the main condenser is the chimney by way of the augmented offgas system (AOG).

6.2.2.1. SJAE-AOG Pathway

The SRP assumes the CRD radioactivity release is transported to the condenser, the MSIVs close and the SJAEs do not exhaust radioactivity from the condenser. The radioactivity in the condenser leaks to the environment at the rate of 1 volume per day.

The present plant configuration has removed the MSLRM trip function. The above SRP scenario is therefore not applicable. Thus, in a CRDA the MSIVs remain open allowing the SJAE to remain in operation. Radioactivity from the CRDA is exhausted through the SJAE and the AOG and discharged through the condenser to the station chimney. The exhaust rate from the condenser to the AOG is conservatively assumed to be 100% per day (§ 3.17).

Leakage rate of the main condenser is calculated as follows:

$$\begin{aligned} \text{secondary leakage} &= \left(1 \frac{\text{volume}}{\text{day}} \right) \left(\frac{1 \text{ day}}{86,400 \text{ s}} \right) \\ &= 1.157E-5 \text{ s}^{-1} \end{aligned}$$

6.2.2.2. Gland Steam Discharge Pathway

Instantaneous leakage to the environment is assumed for the gland steam condenser. No credit is taken for iodide removal through absorption in water or plate out. Thus, this assumption is conservative. The secondary leakage is set at 1 volume per second.

6.3. Secondary Activity Reductions and Cleanup

For the release to the AOG system and the plant stack, the iodine species will be effectively and efficiently trapped in the deep bed charcoal filters. As such the non-removal factor for the secondary is set to zero for particulate, gaseous, and organic iodides. The noble gases will be

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retained in the AOG for a hold up period allowing some reduction in activity. For this calculation, no credit is taken for noble gas holdup in the AOG.

6.4. AXIDENT Evaluation

The AXIDENT code was used to calculate the release on the basis of the total flow going to each of the two release paths. The detailed computer outputs are given in attachments 2 through 13. The releases were weighted by the ratio of the flow going to a specific path to the total flow and summed to obtain the dose at the control room, the low population zone, and the exclusion area boundary. As calculated in §6.2.1, 99.83% of release contribution results from the leakage from the main steam condenser, which passes through SJAE-AOG, and released to the environment as an elevated release. The balance of 0.153% of release contribution results from the leakage from gland steam. Table 7 shows contribution from each path, which was calculated from AXIDENT-calculated dose values and the above weighting factors and the total dose. Table 7 shows that the doses from TID-14844 source term are more limiting than that from the two Siemens source terms. Table 8 compares the limiting dose results, i.e., for the TID-14844 source term, with the SRP limits. Table 8 shows that the calculated limiting doses are well below the SRP limits.

Appendix A gives the AXIDENT code runs made with ICRP-30 DCF's for the MVP and gland seal release pathways to determine the effect of lower DCF's than ICRP-2 DCF's, which were used for the base case calculations. Table 9 compares the thyroid doses calculated using ICRP-2 and ICRP-30 DCF's. The thyroid doses calculated with ICRP 30 DCF's give between 40 – 43 % reduction of doses than that calculated with ICRP-2 DCF's.

7. SUMMARY AND CONCLUSIONS

This calculation is to support Technical Specifications changes and updated final safety analysis report (UFSAR) revisions on the elimination of the need for automatic closure of MSIVs on high MSLRM signals. [5.1, 5.2] The calculated doses at control room, LPZ, and EAB following a design basis CRDA are listed in table 7. These doses are within the established regulatory guidelines as show in table 2. As such, the CRDA without actuation of the MSIV's is a minimal risk to plant operators and the general public.

Table 7. Summary of Doses Calculated at LPZ, Control Room, and EAB for TID and Siemens Source Terms Using ICRP-2 DCF's*

Fuel Type	Path	LPZ				Control Room				EAB			
		Dose (Rem)			Att.	Dose (Rem)			Att.	Dose (Rem)			Att.
		Thyroid	Whole Body	Beta		Thyroid	Whole Body	Beta		Thyroid	Whole Body	Beta	
TID-14844	MVP	0.143	3.73E-2	1.42E-2	B	2.98	8.78E-3	0.176	B	1.29	0.338	0.128	E
	AOG	0	0.412	0.241	C	0	0.195	3.94	C	0	2.11	0.912	F
	Gland	8.63E-2	2.25E-2	8.52E-3	D	1.81	5.31E-3	0.106	D	0.781	0.204	7.72E-2	G
	Total	0.229	0.472	0.263	-	4.78	0.209	4.23	-	2.07	2.65	1.12	-
Siemens 20 GWd/MTU	MVP	0.127	2.79E-2	9.58E-3	H	2.65	5.56E-3	0.107	H	1.15	0.253	8.68E-2	K
	AOG	0	0.267	0.142	I	0	0.116	2.22	I	0	1.49	0.579	L
	Gland	7.66E-2	1.67E-2	5.76E-3	J	1.61	3.37E-3	6.44E-2	J	0.693	0.152	5.22E-2	M
	Total	0.203	0.311	0.157	-	4.25	0.125	2.39	-	1.84	1.89	0.718	-
Siemens 60 GWd/MTU	MVP	0.132	2.53E-2	8.37E-3	N	2.77	4.22E-3	0.087	N	1.20	0.229	7.58E-2	Q
	AOG	0	0.212	0.118	O	0	8.24E-2	1.75	O	0	1.27	0.482	R
	Gland	7.98E-2	1.52E-2	5.03E-3	P	1.68	2.55E-3	0.052	P	0.724	0.137	4.55E-2	S
	Total	0.212	0.252	0.131	-	4.45	0.089	1.89	-	1.92	1.63	0.604	-

* Note: AXIDENT computer runs were made assuming all the release passing through one release path at a time. The results presented in the table were weighted with the actual release fraction through each path.

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Table 8. Comparison of the Limiting Dose Results (for TID-14844 Source Term), Calculated Using ICRP-2 DCF's, with the SRP limits

Location	Dose	Thyroid (Rem)	Whole Body (Rem)	Beta Dose (Rem)
LPZ Dose	AXIDENT Prediction	0.229	0.472	0.263
	SRP 15.4.9 Limit	75	6	-
Control Room	AXIDENT Prediction	4.78	0.209	4.23
	SRP 6.4 Limits	30	5	30
EAB Dose	AXIDENT Prediction	2.07	2.65	1.12
	SRP 15.4.9 Limit	75	6	-

Table 9. Comparison of Thyroid Doses calculated Using ICRP-2 and ICRP-30 DCF's

Fuel Type	Location	Dose (rem) W/ ICRP 2 DCF's (Table 7)	Dose (rem) W/ ICRP 30 DCF's (Table A-1)	Dose Reduction w/ ICRP-30 DCF's Compared to ICRP-2 DCF's
TID-14844	LPZ	0.229	0.130	43%
	CR	4.78	2.77	42%
	EAB	2.07	1.17	43%
Siemens 20 GWd/MTU	LPZ	0.203	0.117	42%
	CR	4.25	2.52	41%
	EAB	1.84	1.06	42%
Siemens 60 GWd/MTU	LPZ	0.212	0.125	41%
	CR	4.45	2.68	40%
	EAB	1.92	1.13	41%

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Appendix A: Calculation of the Effect of ICRP 30 DCF's on Thyroid Doses

Appendix A gives the AXIDENT code runs made with ICRP-30 DCF's for the gland seal steam pathway cases to determine the effect of lower DCF's than ICRP-2 DCF's, which were used for the base case calculations. The AXIDENT code output is given in attachments A-A through A-L. Table A-1 shows a summary of results.

Table A-1. Summary of Thyroid Doses Calculated at LPZ, Control Room, and EAB for TID and Siemens Source Terms Using ICRP-30 DCF's*

Fuel Type	Path	LPZ		Control Room		EAB	
		Thyroid Dose (Rem)	Att.	Thyroid Dose (Rem)	Att.	Thyroid Dose (Rem)	Att.
TID-14844	MVP	8.07E-2	A-A	1.73	A-A	0.73	A-C
	Gland	4.89E-2	A-B	1.05	A-B	0.443	A-D
	Total	0.130	-	2.77	-	1.17	-
Siemens 20 GWd/MTU	MVP	7.31E-2	A-E	1.57	A-E	0.66	A-G
	Gland	4.43E-2	A-F	0.95	A-F	0.401	A-H
	Total	0.117	-	2.52	-	1.06	-
Siemens 60 GWd/MTU	MVP	7.77E-2	A-I	1.67	A-I	0.704	A-K
	Gland	4.71E-2	A-J	1.01	A-J	0.426	A-L
	Total	0.125	-	2.68	-	1.13	-

* Note: AXIDENT computer runs were made assuming all the release passing through one release path at a time. The results presented in the table were weighted with the actual release fraction through each path.

ATTACHMENTS TO APPENDIX A

Att. No.	Description
A-A	QDC CRDA, TID-14844, LPZ & CR, MVP Release, Using ICRP-30 DCF's for Thyroid Dose (Pages A-A1 – A-A3)
A-B	QDC CRDA, TID-14844, LPZ & CR, Gland Release, Using ICRP-30 DCF's for Thyroid Dose (Pages A-B1 – A-B6)
A-C	QDC CRDA, TID-14844, EAB, MVP Release, Using ICRP-30 DCF's for Thyroid Dose (Pages A-C1 – A-C3)
A-D	QDC CRDA, TID-14844, EAB, Gland Release, Using ICRP-30 DCF's for Thyroid Dose (Pages A-D1 – A-D4)
A-E	QDC CRDA, Siemens 20 GWd/MTU, LPZ & CR, MVP Release, Using ICRP-30 DCF's for Thyroid Dose (Pages A-E1 – A-E3)
A-F	QDC CRDA, Siemens 20 GWd/MTU, LPZ & CR, Gland Release, Using ICRP-30 DCF's for Thyroid Dose (Pages A-F1 – A-F6)
A-G	QDC CRDA, Siemens 20 GWd/MTU, EAB, MVP Release, Using ICRP-30 DCF's for Thyroid Dose (Pages A-G1 – A-G3)
A-H	QDC CRDA, Siemens 20 GWd/MTU, EAB, Gland Release, Using ICRP-30 DCF's for Thyroid Dose (Pages A-H1 – A-H4)
A-I	QDC CRDA, Siemens 60 GWd/MTU, LPZ & CR, MVP Release, Using ICRP-30 DCF's for Thyroid Dose (Pages A-I1 – A-I3)
A-J	QDC CRDA, Siemens 60 GWd/MTU, LPZ & CR, Gland Release, Using ICRP-30 DCF's for Thyroid Dose (Pages A-J1 – A-J6)
A-K	QDC CRDA, Siemens 60 GWd/MTU, EAB, MVP Release, Using ICRP-30 DCF's for Thyroid Dose (Pages A-K1 – A-K3)
A-L	QDC CRDA, Siemens 60 GWd/MTU, EAB, Gland Release, Using ICRP-30 DCF's for Thyroid Dose (Pages A-L1 – A-L4)

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 10:20:20.48

1 QDC CRDA, CR & LPZ, ALL REL MVP: TID-14844: 0 - 6 s
 2 2 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 2.592E6
 6 0.2402 0.
 7 9.058E-4 0.
 8 2*1.
 9 2*2460
 10 3.2E-5 0.
 11 7.00E-4 0.
 12 2*0.
 13 2*0.
 14 2*0.
 15 2*0.
 16 2*0.
 17 2*0.
 18 2*0.
 19 2*0.
 20 2*0.
 21 6*1.
 22 3*1.
 23 7.16E+3 1.06E+4 1.65E+4 1.92E+4 1.52E+4 1.36E+3 1.05E+4 4.13E+5
 24 1.11E+5 3.89E+5 3.65E+5 3.21E+4 8.04E+4 2.70E+3 1.55E+5 2.20E+5

1

QDC CRDA, CR & LPZ, ALL REL MVP: TID-14844: 0 - 6 s

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	7.160E+03
I-132	1.060E+04
I-133	1.650E+04
I-134	1.920E+04
I-135	1.520E+04
XE-131M	1.360E+03
XE-133M	1.050E+04
XE-133	4.130E+05
XE-135M	1.110E+05
XE-135	3.890E+05
XE-138	3.650E+05
KR-83M	3.210E+04
KR-85M	8.040E+04
KR-85	2.700E+03
KR-87	1.550E+05
KR-88	2.200E+05

1

QDC CRDA, CR & LPZ, ALL REL MVP: TID-14844: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

00.00 X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .78E+02 VOL/DAY PCT PRI LKG TO ATM =

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	3.85E+02	1.24E+03	4.16E+00	3.38E-03	6.46E-07	5.08E-02	1.23E-05	6.02E-06	5.47E-04	4.74E-09	6.49E-08
I-132	5.70E+02	1.83E+03	6.15E+00	4.99E-03	9.56E-07	4.30E-04	1.18E-04	2.03E-05	4.63E-06	3.93E-08	2.18E-07
I-133	8.88E+02	2.86E+03	9.58E+00	7.78E-03	1.49E-06	1.91E-02	3.65E-05	2.98E-05	2.06E-04	1.76E-08	3.21E-07
I-134	1.03E+03	3.32E+03	1.11E+01	9.04E-03	1.73E-06	1.36E-04	1.73E-04	3.73E-05	1.46E-06	7.64E-08	4.02E-07

I-135	8.18E+02	2.63E+03	8.82E+00	7.16E-03	1.37E-06	3.04E-03	1.26E-04	2.00E-05	3.27E-05	3.29E-08	2.15E-07	
PARTICULATE												
I-131	2.12E+01	6.81E+01	2.28E-01	1.85E-04	3.55E-08	2.79E-03	6.78E-07	3.31E-07	3.00E-05	2.61E-10	3.57E-09	
I-132	3.13E+01	1.01E+02	3.38E-01	2.74E-04	5.25E-08	2.36E-05	6.49E-06	1.11E-06	2.55E-07	2.16E-09	1.20E-08	
I-133	4.88E+01	1.57E+02	5.26E-01	4.27E-04	8.18E-08	1.05E-03	2.01E-06	1.64E-06	1.13E-05	9.68E-10	1.76E-08	
I-134	5.67E+01	1.82E+02	6.12E-01	4.97E-04	9.51E-08	7.47E-06	9.49E-06	2.05E-06	8.05E-08	4.20E-09	2.21E-08	
I-135	4.50E+01	1.45E+02	4.85E-01	3.94E-04	7.53E-08	1.67E-04	6.90E-06	1.10E-06	1.80E-06	1.81E-09	1.18E-08	
ORGANIC												
I-131	1.69E+01	5.45E+01	1.83E-01	1.48E-04	2.84E-08	2.23E-03	5.42E-07	2.65E-07	2.40E-05	2.08E-10	2.85E-09	
I-132	2.51E+01	8.06E+01	2.70E-01	2.20E-04	4.20E-08	1.89E-05	5.19E-06	8.91E-07	2.04E-07	1.73E-09	9.60E-09	
I-133	3.90E+01	1.26E+02	4.21E-01	3.42E-04	6.54E-08	8.41E-04	1.61E-06	1.31E-06	9.06E-06	7.74E-10	1.41E-08	
I-134	4.54E+01	1.46E+02	4.89E-01	3.97E-04	7.61E-08	5.98E-06	7.59E-06	1.64E-06	6.44E-08	3.36E-09	1.76E-08	
I-135	3.60E+01	1.16E+02	3.88E-01	3.15E-04	6.03E-08	1.33E-04	5.52E-06	8.79E-07	1.44E-06	1.45E-09	9.47E-09	
NOBLE GASES												
XE-131M	3.22E+02	1.03E+03	3.47E+00	2.82E-03	5.39E-07	0.00E+00	6.11E-07	3.45E-06	0.00E+00	1.03E-09	3.71E-08	
XE-133M	2.48E+03	7.99E+03	2.68E+01	2.18E-02	4.16E-06	0.00E+00	7.07E-06	3.06E-05	0.00E+00	3.50E-09	3.29E-07	
XE-133	9.77E+04	3.14E+05	1.05E+03	8.56E-01	1.64E-04	0.00E+00	2.53E-04	1.13E-03	0.00E+00	3.08E-07	1.22E-05	
XE-135M	2.62E+04	8.41E+04	2.82E+02	2.29E-01	4.38E-05	0.00E+00	9.53E-04	2.02E-04	0.00E+00	3.77E-07	2.17E-06	
XE-135	9.20E+04	2.96E+05	9.92E+02	8.06E-01	1.54E-04	0.00E+00	1.95E-03	2.35E-03	0.00E+00	7.51E-07	2.53E-05	
XE-138	8.60E+04	2.77E+05	9.29E+02	7.53E-01	1.44E-04	0.00E+00	2.13E-02	5.47E-03	0.00E+00	2.18E-06	5.89E-05	
KR-83M	7.59E+03	2.44E+04	8.19E+01	6.65E-02	1.27E-05	0.00E+00	3.27E-06	2.05E-05	0.00E+00	1.93E-08	2.21E-07	
KR-85M	1.90E+04	6.12E+04	2.05E+02	1.67E-01	3.19E-05	0.00E+00	2.56E-04	3.52E-04	0.00E+00	1.06E-07	3.79E-06	
KR-85	6.39E+02	2.05E+03	6.89E+00	5.59E-03	1.07E-06	0.00E+00	1.16E-07	1.13E-05	0.00E+00	4.55E-11	1.22E-07	
KR-87	3.66E+04	1.18E+05	3.95E+02	3.21E-01	6.14E-05	0.00E+00	4.35E-03	3.05E-03	0.00E+00	8.34E-07	3.29E-05	
KR-88	5.20E+04	1.67E+05	5.61E+02	4.56E-01	8.72E-05	0.00E+00	7.82E-03	1.41E-03	0.00E+00	2.58E-06	1.52E-05	
							8.08E-02	3.74E-02	1.42E-02	8.70E-04	7.34E-06	1.52E-04

1 QDC CRDA, CR & LPZ, ALL REL MVP: TID-14844: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 720.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)			
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA	
ELEMENTAL												
I-131	2.91E+01	9.35E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E+00	9.58E-06	1.31E-04	
I-132	3.44E-92	1.10E-91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.83E-03	5.79E-05	3.22E-04	
I-133	4.23E-08	1.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-01	3.43E-05	6.26E-04	
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-03	7.75E-05	4.08E-04	
I-135	4.03E-30	1.30E-29	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.88E-02	5.91E-05	3.87E-04	
PARTICULATE												
I-131	1.60E+00	5.14E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-02	5.26E-07	7.21E-06	
I-132	1.89E-93	6.07E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-04	3.18E-06	1.77E-05	
I-133	2.32E-09	7.47E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-02	1.89E-06	3.44E-05	
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.17E-05	4.26E-06	2.24E-05	
I-135	2.22E-31	7.12E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-03	3.25E-06	2.13E-05	
ORGANIC												
I-131	1.28E+00	4.11E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.86E-02	4.21E-07	5.76E-06	
I-132	1.51E-93	4.86E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.00E-04	2.55E-06	1.42E-05	
I-133	1.86E-09	5.97E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-02	1.51E-06	2.75E-05	
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.53E-05	3.41E-06	1.79E-05	
I-135	1.77E-31	5.70E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-03	2.60E-06	1.70E-05	
NOBLE GASES												
XE-131M	5.54E+01	1.78E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-06	7.51E-05	
XE-133M	2.51E-01	8.06E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-06	6.58E-04	
XE-133	1.90E+03	6.11E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.22E-04	2.46E-02	
XE-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-04	1.02E-03	
XE-135	1.63E-19	5.24E-19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-03	4.70E-02	
XE-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-03	3.01E-02	
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-05	3.06E-04	
KR-85M	9.42E-46	3.03E-45	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-04	6.42E-03	
KR-85	6.36E+02	2.04E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.25E-08	2.47E-04	
KR-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03	3.96E-02	
KR-88	1.86E-73	5.97E-73	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-03	2.35E-02	
							0.00E+00	0.00E+00	0.00E+00	1.73E+00	8.78E-03	1.76E-01

TOTAL DOSES 0-30 DAYS ===== ===== ===== ===== ===== =====
 8.08E-02 3.74E-02 1.42E-02 1.73E+00 8.79E-03 1.76E-01

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QDC CRDA, CR & LPZ, ALL REL MVP: TID-14844: 0 - 6 s

ISOTOPE	ACTIVITY RELEASED (CURIES)		
	0. HRS	720. HRS	
ELEMENTAL			
I-131	4.16E+00	0.00E+00	4.16E+00
I-132	6.15E+00	0.00E+00	6.15E+00
I-133	9.58E+00	0.00E+00	9.58E+00
I-134	1.11E+01	0.00E+00	1.11E+01
I-135	8.82E+00	0.00E+00	8.82E+00
PARTICULATE			
I-131	2.28E-01	0.00E+00	2.28E-01
I-132	3.38E-01	0.00E+00	3.38E-01
I-133	5.26E-01	0.00E+00	5.26E-01
I-134	6.12E-01	0.00E+00	6.12E-01
I-135	4.85E-01	0.00E+00	4.85E-01
ORGANIC			
I-131	1.83E-01	0.00E+00	1.83E-01
I-132	2.70E-01	0.00E+00	2.70E-01
I-133	4.21E-01	0.00E+00	4.21E-01
I-134	4.89E-01	0.00E+00	4.89E-01
I-135	3.88E-01	0.00E+00	3.88E-01
NOBLE GASES			
XE-131M	3.47E+00	0.00E+00	3.47E+00
XE-133M	2.68E+01	0.00E+00	2.68E+01
XE-133	1.05E+03	0.00E+00	1.05E+03
XE-135M	2.82E+02	0.00E+00	2.82E+02
XE-135	9.92E+02	0.00E+00	9.92E+02
XE-138	9.29E+02	0.00E+00	9.29E+02
KR-83M	8.19E+01	0.00E+00	8.19E+01
KR-85M	2.05E+02	0.00E+00	2.05E+02
KR-85	6.89E+00	0.00E+00	6.89E+00
KR-87	3.95E+02	0.00E+00	3.95E+02
KR-88	5.61E+02	0.00E+00	5.61E+02

END EXECUTION DATE: 11/18/1999
 END EXECUTION TIME: 10:20:20.59

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 08:57:52.35

1 QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d
 2 6 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 1800 7200 2.88+4 8.64+4 2.592E6
 6 0.2402 4*1.201E-2 0.
 7 5*1. 0.
 8 6*1.
 9 6*2460
 10 2*3.2E-5 2*9.0E-6 3.0E-6 0.
 11 3*7.00E-4 6.45E-6 3.81E-6 0.
 12 6*0.
 13 6*0.
 14 6*0.
 15 6*0.
 16 6*0.
 17 6*0.
 18 6*0.
 19 6*0.
 20 6*0.
 21 6*1.
 22 3*1.
 23 7.16E+3 1.06E+4 1.65E+4 1.92E+4 1.52E+4 1.36E+3 1.05E+4 4.13E+5
 24 1.11E+5 3.89E+5 3.65E+5 3.21E+4 8.04E+4 2.70E+3 1.55E+5 2.20E+5

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QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	7.160E+03
I-132	1.060E+04
I-133	1.650E+04
I-134	1.920E+04
I-135	1.520E+04
XE-131M	1.360E+03
XE-133M	1.050E+04
XE-133	4.130E+05
XE-135M	1.110E+05
XE-135	3.890E+05
XE-138	3.650E+05
KR-83M	3.210E+04
KR-85M	8.040E+04
KR-85	2.700E+03
KR-87	1.550E+05
KR-88	2.200E+05

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QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

00.00 X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	3.85E+02	1.21E+02	1.12E+03	9.12E-01	1.75E-04	1.37E+01	3.33E-03	1.63E-03	2.06E-01	1.79E-06	2.45E-05
I-132	5.70E+02	1.78E+02	1.66E+03	1.35E+00	2.58E-04	1.16E-01	3.19E-02	5.48E-03	1.75E-03	1.48E-05	8.24E-05
I-133	8.88E+02	2.78E+02	2.59E+03	2.10E+00	4.02E-04	5.17E+00	9.87E-03	8.06E-03	7.77E-02	6.64E-06	1.21E-04
I-134	1.03E+03	3.23E+02	3.01E+03	2.44E+00	4.67E-04	3.68E-02	4.67E-02	1.01E-02	5.52E-04	2.88E-05	1.51E-04

I-135	8.18E+02	2.56E+02	2.38E+03	1.94E+00	3.70E-04	8.20E-01	3.39E-02	5.40E-03	1.23E-02	1.24E-05	8.12E-05
PARTICULATE											
I-131	2.12E+01	6.63E+00	6.17E+01	5.01E-02	9.59E-06	7.54E-01	1.83E-04	8.95E-05	1.13E-02	9.82E-08	1.34E-06
I-132	3.13E+01	9.80E+00	9.13E+01	7.41E-02	1.42E-05	6.39E-03	1.75E-03	3.01E-04	9.60E-05	8.14E-07	4.53E-06
I-133	4.88E+01	1.53E+01	1.42E+02	1.15E-01	2.21E-05	2.84E-01	5.43E-04	4.43E-04	4.27E-03	3.65E-07	6.65E-06
I-134	5.67E+01	1.77E+01	1.65E+02	1.34E-01	2.57E-05	2.02E-03	2.56E-03	5.54E-04	3.04E-05	1.58E-06	8.32E-06
I-135	4.50E+01	1.41E+01	1.31E+02	1.06E-01	2.04E-05	4.51E-02	1.86E-03	2.97E-04	6.78E-04	6.82E-07	4.46E-06
ORGANIC											
I-131	1.69E+01	5.30E+00	4.94E+01	4.01E-02	7.67E-06	6.03E-01	1.46E-04	7.16E-05	9.06E-03	7.86E-08	1.08E-06
I-132	2.51E+01	7.84E+00	7.31E+01	5.93E-02	1.14E-05	5.11E-03	1.40E-03	2.41E-04	7.68E-05	6.51E-07	3.62E-06
I-133	3.90E+01	1.22E+01	1.14E+02	9.24E-02	1.77E-05	2.27E-01	4.34E-04	3.54E-04	3.42E-03	2.92E-07	5.32E-06
I-134	4.54E+01	1.42E+01	1.32E+02	1.07E-01	2.05E-05	1.62E-03	2.05E-03	4.43E-04	2.43E-05	1.27E-06	6.66E-06
I-135	3.60E+01	1.13E+01	1.05E+02	8.51E-02	1.63E-05	3.61E-02	1.49E-03	2.37E-04	5.42E-04	5.45E-07	3.57E-06
NOBLE GASES											
XE-131M	3.22E+02	1.01E+02	9.37E+02	7.61E-01	1.46E-04	0.00E+00	1.65E-04	9.31E-04	0.00E+00	3.88E-07	1.40E-05
XE-133M	2.48E+03	7.77E+02	7.24E+03	5.88E+00	1.13E-03	0.00E+00	1.91E-03	8.26E-03	0.00E+00	1.32E-06	1.24E-04
XE-133	9.77E+04	3.06E+04	2.85E+05	2.31E+02	4.43E-02	0.00E+00	6.83E-02	3.06E-01	0.00E+00	1.16E-04	4.60E-03
XE-135M	2.62E+04	8.18E+03	7.64E+04	6.19E+01	1.18E-02	0.00E+00	2.58E-01	5.45E-02	0.00E+00	1.42E-04	8.19E-04
XE-135	9.20E+04	2.88E+04	2.68E+05	2.18E+02	4.17E-02	0.00E+00	5.28E-01	6.35E-01	0.00E+00	2.83E-04	9.55E-03
XE-138	8.60E+04	2.69E+04	2.51E+05	2.04E+02	3.90E-02	0.00E+00	5.77E-00	1.48E+00	0.00E+00	8.21E-04	2.22E-02
KR-83M	7.59E+03	2.37E+03	2.21E+04	1.80E+01	3.44E-03	0.00E+00	8.85E-04	5.54E-03	0.00E+00	7.27E-06	8.32E-05
KR-85M	1.90E+04	5.95E+03	5.54E+04	4.50E+01	8.61E-03	0.00E+00	6.92E-02	9.50E-02	0.00E+00	3.99E-05	1.43E-03
KR-85	6.39E+02	2.00E+02	1.86E+03	1.51E+00	2.89E-04	0.00E+00	3.13E-05	3.05E-03	0.00E+00	1.72E-08	4.59E-05
KR-87	3.66E+04	1.15E+04	1.07E+05	8.67E+01	1.67E-02	0.00E+00	1.17E+00	8.25E-01	0.00E+00	3.15E-04	1.24E-02
KR-88	5.20E+04	1.63E+04	1.52E+05	1.23E+02	2.36E-02	0.00E+00	2.11E+00	3.81E-01	0.00E+00	9.73E-04	5.72E-03
						2.18E+01	1.01E+01	3.83E+00	3.28E-01	2.77E-03	5.75E-02

1 QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .500 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)			SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL												
I-131	1.69E-07	2.05E-09	5.06E+02	8.91E-01	1.70E-04	6.18E+00	1.50E-03	7.34E-04	1.42E+02	1.23E-03	1.68E-02	
I-132	2.16E-07	2.62E-09	7.45E+02	1.14E+00	2.17E-04	5.21E-02	1.43E-02	2.46E-03	1.12E+00	9.49E-03	5.28E-02	
I-133	3.84E-07	4.67E-09	1.17E+03	2.02E+00	3.87E-04	2.33E+00	4.45E-03	3.63E-03	5.30E+01	4.53E-03	8.26E-02	
I-134	3.04E-07	3.70E-09	1.34E+03	1.60E+00	3.07E-04	1.63E-02	2.07E-02	4.47E-03	3.16E-01	1.65E-02	8.67E-02	
I-135	3.41E-07	4.15E-09	1.07E+03	1.80E+00	3.44E-04	3.69E-01	1.53E-02	2.43E-03	8.27E+00	8.32E-03	5.45E-02	
PARTICULATE												
I-131	9.29E-09	1.13E-10	2.78E+01	4.89E-02	9.37E-06	3.40E-01	8.25E-05	4.03E-05	7.78E+00	6.75E-05	9.23E-04	
I-132	1.18E-08	1.44E-10	4.09E+01	6.24E-02	1.19E-05	2.86E-03	7.86E-04	1.35E-04	6.15E-02	5.22E-04	2.90E-03	
I-133	2.11E-08	2.56E-10	6.40E+01	1.11E-01	2.13E-05	1.28E-01	2.44E-04	1.99E-04	2.91E+00	2.49E-04	4.54E-03	
I-134	1.67E-08	2.03E-10	7.34E+01	8.81E-02	1.69E-05	8.97E-04	1.14E-03	2.46E-04	1.74E-02	9.06E-04	4.77E-03	
I-135	1.88E-08	2.28E-10	5.89E+01	9.88E-02	1.89E-05	2.03E-02	8.38E-04	1.34E-04	4.55E-01	4.57E-04	2.99E-03	
ORGANIC												
I-131	7.43E-09	9.03E-11	2.22E+01	3.91E-02	7.49E-06	2.72E-01	6.60E-05	3.22E-05	6.22E+00	5.40E-05	7.39E-04	
I-132	9.48E-09	1.15E-10	3.27E+01	4.99E-02	9.56E-06	2.29E-03	6.29E-04	1.08E-04	4.92E-02	4.17E-04	2.32E-03	
I-133	1.69E-08	2.05E-10	5.12E+01	8.89E-02	1.70E-05	1.02E-01	1.95E-04	1.59E-04	2.33E+00	1.99E-04	3.63E-03	
I-134	1.34E-08	1.63E-10	5.87E+01	7.05E-02	1.35E-05	7.17E-04	9.11E-04	1.97E-04	1.39E-02	7.25E-04	3.81E-03	
I-135	1.50E-08	1.82E-10	4.71E+01	7.91E-02	1.51E-05	1.62E-02	6.71E-04	1.07E-04	3.64E-01	3.66E-04	2.39E-03	
NOBLE GASES												
XE-131M	1.41E-07	1.72E-09	4.22E+02	7.44E-01	1.42E-04	0.00E+00	7.44E-05	4.20E-04	0.00E+00	2.67E-04	9.62E-03	
XE-133M	1.08E-06	1.32E-08	3.26E+03	5.71E+00	1.09E-03	0.00E+00	8.61E-04	3.72E-03	0.00E+00	9.06E-04	8.51E-02	
XE-133	4.28E-05	5.20E-07	1.28E+05	2.26E+02	4.32E-02	0.00E+00	3.08E-02	1.38E-01	0.00E+00	7.99E-02	3.16E+00	
XE-135M	3.05E-06	3.70E-08	3.28E+04	1.60E+01	3.07E-03	0.00E+00	1.11E-01	2.34E-02	0.00E+00	5.58E-02	3.22E-01	
XE-135	3.89E-05	4.73E-07	1.21E+05	2.05E+02	3.93E-02	0.00E+00	2.37E-01	2.86E-01	0.00E+00	1.91E-01	6.45E+00	
XE-138	1.16E-05	1.41E-07	1.08E+05	6.09E+01	1.17E-02	0.00E+00	2.49E+00	6.38E-01	0.00E+00	3.40E-01	9.21E+00	
KR-83M	2.77E-06	3.37E-08	9.90E+03	1.46E+01	2.80E-03	0.00E+00	3.96E-04	2.48E-03	0.00E+00	4.59E-03	5.25E-02	
KR-85M	7.72E-06	9.39E-08	2.49E+04	4.07E+01	7.79E-03	0.00E+00	3.11E-02	4.27E-02	0.00E+00	2.59E-02	9.46E-01	
KR-85	2.81E-07	3.41E-09	8.39E+02	1.48E+00	2.83E-04	0.00E+00	1.41E-05	1.38E-03	0.00E+00	1.18E-05	3.16E-02	
KR-87	1.23E-05	1.49E-07	4.76E+04	6.46E+01	1.24E-02	0.00E+00	5.24E-01	3.68E-01	0.00E+00	1.91E-01	7.52E+00	
KR-88	2.02E-05	2.46E-07	6.80E+04	1.06E+02	2.04E-02	0.00E+00	9.48E-01	1.71E-01	0.00E+00	6.31E-01	3.71E+00	
						9.83E+00	4.43E+00	1.69E+00	2.25E+02	1.57E+00	3.18E+01	

1 QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 2.000 HOURS: X/Q(SITE)= .90E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Includes sub-sections for ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES with various isotope data.

1 QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 8.000 HOURS: X/Q(SITE)= .90E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .65E-05 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Includes sub-sections for ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES with various isotope data.

Table with columns for ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES, listing isotopes (I-131, I-132, etc.) and their respective concentrations in scientific notation.

1 QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 24.000 HOURS: X/Q(SITE)= .30E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .38E-05 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns for CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS, listing values for SPRAY, PRIMARY, SECONDARY, CONT CENTER, RELEASE, and CONT CENTER.

Table with columns for ISOTOPE, ACTIVITY (CURIES), CONTROL ROOM DOSES (REM), and SITE BOUNDARY DOSES (REM), listing isotopes and their associated activity and dose values.

KR-87	0.00E+00	0.00E+00	0.00E+00	1.15E-12	2.20E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.28E-06	3.26E-04
KR-88	0.00E+00	0.00E+00	0.00E+00	2.16E-09	4.14E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-04	2.12E-03
						0.00E+00	0.00E+00	0.00E+00	1.01E+00	1.34E-03	3.70E-02

1 QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 720.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

00.00 X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM =

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA		
ELEMENTAL											
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-06	1.59E-11	2.18E-10
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.94E-12	7.58E-14	4.21E-13
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.29E-07	2.81E-11	5.13E-10
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-17	6.56E-19	3.45E-18
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.91E-09	8.96E-12	5.87E-11
PARTICULATE											
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-07	8.74E-13	1.20E-11
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-13	4.17E-15	2.32E-14
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-08	1.55E-12	2.82E-11
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.92E-19	3.61E-20	1.90E-19
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.90E-10	4.92E-13	3.22E-12
ORGANIC											
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.06E-08	6.99E-13	9.57E-12
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-13	3.33E-15	1.85E-14
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-08	1.24E-12	2.25E-11
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.53E-19	2.89E-20	1.52E-19
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.92E-10	3.94E-13	2.58E-12
NOBLE GASES											
XE-131M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-12	1.28E-10
XE-133M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.32E-12	8.75E-10
XE-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.86E-10	3.90E-08
XE-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-38	3.16E-37
XE-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-10	1.37E-08
XE-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-34	9.38E-33
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.61E-15	7.56E-14
KR-85M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-12	2.64E-10
KR-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-13	4.47E-10
KR-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-15	1.42E-13
KR-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-11	1.11E-10
						0.00E+00	0.00E+00	0.00E+00	2.39E-06	1.49E-09	5.54E-08
TOTAL DOSES 0-30 DAYS						3.17E+01	1.46E+01	5.52E+00	6.78E+02	3.44E+00	6.86E+01

1 QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d

ISOTOPE	ACTIVITY RELEASED (CURIES)			
	2. HRS	8. HRS	24. HRS	720. HRS
ELEMENTAL				
I-131	1.63E+03	1.16E-35	0.00E+00	0.00E+00
I-132	2.41E+03	9.42E-36	0.00E+00	0.00E+00
I-133	3.75E+03	2.52E-35	0.00E+00	0.00E+00
I-134	4.35E+03	6.23E-36	0.00E+00	0.00E+00
I-135	3.46E+03	2.02E-35	0.00E+00	0.00E+00
PARTICULATE				
I-131	8.95E+01	6.38E-37	0.00E+00	0.00E+00
I-132	1.32E+02	5.17E-37	0.00E+00	0.00E+00
I-133	2.06E+02	1.39E-36	0.00E+00	0.00E+00
I-134	2.39E+02	3.42E-37	0.00E+00	0.00E+00
I-135	1.90E+02	1.11E-36	0.00E+00	0.00E+00
ORGANIC				
I-131	7.16E+01	5.11E-37	0.00E+00	0.00E+00
I-132	1.06E+02	4.14E-37	0.00E+00	0.00E+00

I-133	1.65E+02	1.11E-36	0.00E+00	0.00E+00	1.65E+02
I-134	1.91E+02	2.74E-37	0.00E+00	0.00E+00	1.91E+02
I-135	1.52E+02	8.86E-37	0.00E+00	0.00E+00	1.52E+02
NOBLE GASES					
XE-131M	1.36E+03	9.72E-36	0.00E+00	0.00E+00	1.36E+03
XE-133M	1.05E+04	7.35E-35	0.00E+00	0.00E+00	1.05E+04
XE-133	4.13E+05	2.93E-33	0.00E+00	0.00E+00	4.13E+05
XE-135M	1.09E+05	3.65E-36	0.00E+00	0.00E+00	1.09E+05
XE-135	3.89E+05	2.40E-33	0.00E+00	0.00E+00	3.89E+05
XE-138	3.60E+05	2.15E-35	0.00E+00	0.00E+00	3.60E+05
KR-83M	3.20E+04	1.09E-34	0.00E+00	0.00E+00	3.20E+04
KR-85M	8.03E+04	4.20E-34	0.00E+00	0.00E+00	8.03E+04
KR-85	2.70E+03	1.94E-35	0.00E+00	0.00E+00	2.70E+03
KR-87	1.54E+05	3.68E-34	0.00E+00	0.00E+00	1.54E+05
KR-88	2.20E+05	9.57E-34	0.00E+00	0.00E+00	2.20E+05

END EXECUTION DATE: 11/18/1999

END EXECUTION TIME: 08:57:52.51

QDC 9400-M-0550 Rev. 0 Attachment A-B Page A-B6

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 10:20:37.01

1 QDC CRDA, EAB, ALL REL MVP: TID-14844: 0 - 6 s
 2 2 1 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 7200
 6 0.2402 0.
 7 9.058E-4 0.
 8 2*1.
 9 2*0.
 10 2.9E-4 0.
 11 2*0.
 12 2*0.
 13 2*0.
 14 2*0.
 15 2*0.
 16 2*0.
 17 2*0.
 18 2*0.
 19 2*0.
 20 2*0.
 21 6*1.
 22 3*1.
 23 7.16E+3 1.06E+4 1.65E+4 1.92E+4 1.52E+4 1.36E+3 1.05E+4 4.13E+5
 24 1.11E+5 3.89E+5 3.65E+5 3.21E+4 8.04E+4 2.70E+3 1.55E+5 2.20E+5

1

QDC CRDA, EAB, ALL REL MVP: TID-14844: 0 - 6 s

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	7.160E+03
I-132	1.060E+04
I-133	1.650E+04
I-134	1.920E+04
I-135	1.520E+04
XE-131M	1.360E+03
XE-133M	1.050E+04
XE-133	4.130E+05
XE-135M	1.110E+05
XE-135	3.890E+05
XE-138	3.650E+05
KR-83M	3.210E+04
KR-85M	8.040E+04
KR-85	2.700E+03
KR-87	1.550E+05
KR-88	2.200E+05

1

QDC CRDA, EAB, ALL REL MVP: TID-14844: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=
 .0 CFM
 X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .78E+02 VOL/DAY PCT PRI LKG TO ATM =
 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	3.85E+02	1.24E+03	4.16E+00	0.00E+00	0.00E+00	4.60E-01	1.12E-04	5.46E-05	0.00E+00	0.00E+00	0.00E+00
I-132	5.70E+02	1.83E+03	6.15E+00	0.00E+00	0.00E+00	3.90E-03	1.07E-03	1.84E-04	0.00E+00	0.00E+00	0.00E+00
I-133	8.88E+02	2.86E+03	9.58E+00	0.00E+00	0.00E+00	1.73E-01	3.31E-04	2.70E-04	0.00E+00	0.00E+00	0.00E+00
I-134	1.03E+03	3.32E+03	1.11E+01	0.00E+00	0.00E+00	1.23E-03	1.57E-03	3.38E-04	0.00E+00	0.00E+00	0.00E+00

Table with 12 columns of concentration values for isotopes I-135, I-131, I-132, I-133, I-134, I-135, and noble gases (XE, KR). Categories include PARTICULATE, ORGANIC, and NOBLE GASES.

1 QDC CRDA, EAB, ALL REL MVP: TID-14844: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 2.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE= .0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table showing CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS for ELEMENTAL, PARTICULATE, and ORGANIC components.

Large table showing ACTIVITY (CURIES) and CONTROL ROOM/SITE BOUNDARY DOSES (REM) for various isotopes (I-131, I-132, I-133, I-134, I-135) and noble gases (XE, KR).

TOTAL DOSES 0-30 DAYS ===== ===== ===== ===== ===== =====
 7.32E-01 3.39E-01 1.28E-01 0.00E+00 0.00E+00 0.00E+00

1

QDC CRDA, EAB, ALL REL MVP: TID-14844: 0 - 6 s

ISOTOPE	2. HRS	ACTIVITY RELEASED (CURIES)
ELEMENTAL		
I-131	4.16E+00	4.16E+00
I-132	6.15E+00	6.15E+00
I-133	9.58E+00	9.58E+00
I-134	1.11E+01	1.11E+01
I-135	8.82E+00	8.82E+00
PARTICULATE		
I-131	2.28E-01	2.28E-01
I-132	3.38E-01	3.38E-01
I-133	5.26E-01	5.26E-01
I-134	6.12E-01	6.12E-01
I-135	4.85E-01	4.85E-01
ORGANIC		
I-131	1.83E-01	1.83E-01
I-132	2.70E-01	2.70E-01
I-133	4.21E-01	4.21E-01
I-134	4.89E-01	4.89E-01
I-135	3.88E-01	3.88E-01
NOBLE GASES		
XE-131M	3.47E+00	3.47E+00
XE-133M	2.68E+01	2.68E+01
XE-133	1.05E+03	1.05E+03
XE-135M	2.82E+02	2.82E+02
XE-135	9.92E+02	9.92E+02
XE-138	9.29E+02	9.29E+02
KR-83M	8.19E+01	8.19E+01
KR-85M	2.05E+02	2.05E+02
KR-85	6.89E+00	6.89E+00
KR-87	3.95E+02	3.95E+02
KR-88	5.61E+02	5.61E+02

END EXECUTION DATE: 11/18/1999
 END EXECUTION TIME: 10:20:37.01

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 10:20:37.01

1 QDC CRDA, EAB, ALL REL MVP: TID-14844: 0 - 6 s
 2 2 1 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 7200
 6 0.2402 0.
 7 9.058E-4 0.
 8 2*1.
 9 2*0.
 10 2.9E-4 0.
 11 2*0.
 12 2*0.
 13 2*0.
 14 2*0.
 15 2*0.
 16 2*0.
 17 2*0.
 18 2*0.
 19 2*0.
 20 2*0.
 21 6*1.
 22 3*1.
 23 7.16E+3 1.06E+4 1.65E+4 1.92E+4 1.52E+4 1.36E+3 1.05E+4 4.13E+5
 24 1.11E+5 3.89E+5 3.65E+5 3.21E+4 8.04E+4 2.70E+3 1.55E+5 2.20E+5

1

QDC CRDA, EAB, ALL REL MVP: TID-14844: 0 - 6 s

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	7.160E+03
I-132	1.060E+04
I-133	1.650E+04
I-134	1.920E+04
I-135	1.520E+04
XE-131M	1.360E+03
XE-133M	1.050E+04
XE-133	4.130E+05
XE-135M	1.110E+05
XE-135	3.890E+05
XE-138	3.650E+05
KR-83M	3.210E+04
KR-85M	8.040E+04
KR-85	2.700E+03
KR-87	1.550E+05
KR-88	2.200E+05

1

QDC CRDA, EAB, ALL REL MVP: TID-14844: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO
 SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=
 .0 CFM
 X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .78E+02 VOL/DAY PCT PRI LKG TO ATM =
 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)			SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA	
ELEMENTAL												
I-131	3.85E+02	1.24E+03	4.16E+00	0.00E+00	0.00E+00	4.60E-01	1.12E-04	5.46E-05	0.00E+00	0.00E+00	0.00E+00	
I-132	5.70E+02	1.83E+03	6.15E+00	0.00E+00	0.00E+00	3.90E-03	1.07E-03	1.84E-04	0.00E+00	0.00E+00	0.00E+00	
I-133	8.88E+02	2.86E+03	9.58E+00	0.00E+00	0.00E+00	1.73E-01	3.31E-04	2.70E-04	0.00E+00	0.00E+00	0.00E+00	
I-134	1.03E+03	3.32E+03	1.11E+01	0.00E+00	0.00E+00	1.23E-03	1.57E-03	3.38E-04	0.00E+00	0.00E+00	0.00E+00	

Table with 12 columns showing concentrations for various isotopes (I-135, PARTICULATE, ORGANIC, NOBLE GASES, KR-83M, etc.) across different categories.

1 QDC CRDA, EAB, ALL REL MVP: TID-14844: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 2.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE= .0 CFM
X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns for CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS, including sub-columns for SPRAY, PRIMARY, SECONDARY, CONT CENTER, RELEASE, and CONT CENTER.

Table with columns for ISOTOPE, ACTIVITY (CURIES), CONTROL ROOM, SITE BOUNDARY DOSES (REM), and CONTROL ROOM DOSES (REM), listing various isotopes like I-131, I-132, I-133, etc.

TOTAL DOSES 0-30 DAYS	=====	=====	=====	=====	=====	=====
7.32E-01	3.39E-01	1.28E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1

QDC CRDA, EAB, ALL REL MVP: TID-14844: 0 - 6 s

ISOTOPE	2. HRS	ACTIVITY RELEASED (CURIES)
ELEMENTAL		
I-131	4.16E+00	4.16E+00
I-132	6.15E+00	6.15E+00
I-133	9.58E+00	9.58E+00
I-134	1.11E+01	1.11E+01
I-135	8.82E+00	8.82E+00
PARTICULATE		
I-131	2.28E-01	2.28E-01
I-132	3.38E-01	3.38E-01
I-133	5.26E-01	5.26E-01
I-134	6.12E-01	6.12E-01
I-135	4.85E-01	4.85E-01
ORGANIC		
I-131	1.83E-01	1.83E-01
I-132	2.70E-01	2.70E-01
I-133	4.21E-01	4.21E-01
I-134	4.89E-01	4.89E-01
I-135	3.88E-01	3.88E-01
NOBLE GASES		
XE-131M	3.47E+00	3.47E+00
XE-133M	2.68E+01	2.68E+01
XE-133	1.05E+03	1.05E+03
XE-135M	2.82E+02	2.82E+02
XE-135	9.92E+02	9.92E+02
XE-138	9.29E+02	9.29E+02
KR-83M	8.19E+01	8.19E+01
KR-85M	2.05E+02	2.05E+02
KR-85	6.89E+00	6.89E+00
KR-87	3.95E+02	3.95E+02
KR-88	5.61E+02	5.61E+02

END EXECUTION DATE: 11/18/1999
 END EXECUTION TIME: 10:20:37.01

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 10:20:49.97

1 QDC CRDA, EAB, ALL REL GLAND: TID-14844: 0 - 2 h
 2 3 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 1800 7200
 6 0.2402 2*1.201E-2
 7 3*1.
 8 3*1.
 9 3*0.
 10 2*2.9e-4 2.3E-5
 11 3*0.
 12 3*0.
 13 3*0.
 14 3*0.
 15 3*0.
 16 3*0.
 17 3*0.
 18 3*0.
 19 3*0.
 20 3*0.
 21 6*1.
 22 3*1.
 23 7.16E+3 1.06E+4 1.65E+4 1.92E+4 1.52E+4 1.36E+3 1.05E+4 4.13E+5
 24 1.11E+5 3.89E+5 3.65E+5 3.21E+4 8.04E+4 2.70E+3 1.55E+5 2.20E+5

1

QDC CRDA, EAB, ALL REL GLAND: TID-14844: 0 - 2 h

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	7.160E+03
I-132	1.060E+04
I-133	1.650E+04
I-134	1.920E+04
I-135	1.520E+04
XE-131M	1.360E+03
XE-133M	1.050E+04
XE-133	4.130E+05
XE-135M	1.110E+05
XE-135	3.890E+05
XE-138	3.650E+05
KR-83M	3.210E+04
KR-85M	8.040E+04
KR-85	2.700E+03
KR-87	1.550E+05
KR-88	2.200E+05

1

QDC CRDA, EAB, ALL REL GLAND: TID-14844: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO
 SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=
 .0 CFM
 X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =
 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	3.85E+02	1.21E+02	1.12E+03	0.00E+00	0.00E+00	1.24E+02	3.02E-02	1.48E-02	0.00E+00	0.00E+00	0.00E+00
I-132	5.70E+02	1.78E+02	1.66E+03	0.00E+00	0.00E+00	1.05E+00	2.89E-01	4.97E-02	0.00E+00	0.00E+00	0.00E+00
I-133	8.88E+02	2.78E+02	2.59E+03	0.00E+00	0.00E+00	4.69E+01	8.95E-02	7.30E-02	0.00E+00	0.00E+00	0.00E+00
I-134	1.03E+03	3.23E+02	3.01E+03	0.00E+00	0.00E+00	3.33E-01	4.23E-01	9.13E-02	0.00E+00	0.00E+00	0.00E+00

Table with 12 columns and multiple rows categorized by PARTICULATE, ORGANIC, and NOBLE GASES. Each category lists isotopes (e.g., I-131, I-132, I-133, I-134, I-135) with numerical values in scientific notation.

1 QDC CRDA, EAB, ALL REL GLAND: TID-14844: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .500 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0 CFM
X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS table. Columns include SPRAY, PRIMARY, SECONDARY, CONT CENTER, RELEASE, and CONT CENTER. Rows include ELEMENTAL, PARTICULATE, and ORGANIC.

Table with 11 columns: ISOTOPE, ACTIVITY (CURIES), CONTROL ROOM (CURIES), SITE BOUNDARY DOSES (REM), CONTROL ROOM DOSES (REM). Rows are categorized by ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES, listing various isotopes and their associated values.

1 QDC CRDA, EAB, ALL REL GLAND: TID-14844: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 2.000 HOURS: X/Q(SITE)= .23E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=.0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH BODY	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	1.15E-35	1.40E-37	1.71E-07	0.00E+00	0.00E+00	1.50E-09	3.65E-13	1.78E-13	0.00E+00	0.00E+00	0.00E+00
I-132	9.37E-36	1.14E-37	2.17E-07	0.00E+00	0.00E+00	1.09E-11	2.99E-12	5.14E-13	0.00E+00	0.00E+00	0.00E+00
I-133	2.49E-35	3.03E-37	3.88E-07	0.00E+00	0.00E+00	5.58E-10	1.06E-12	8.69E-13	0.00E+00	0.00E+00	0.00E+00
I-134	6.27E-36	7.62E-38	3.03E-07	0.00E+00	0.00E+00	2.66E-12	3.37E-12	7.28E-13	0.00E+00	0.00E+00	0.00E+00
I-135	2.00E-35	2.43E-37	3.45E-07	0.00E+00	0.00E+00	8.53E-11	3.53E-12	5.62E-13	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	6.31E-37	7.67E-39	9.40E-09	0.00E+00	0.00E+00	8.25E-11	2.00E-14	9.79E-15	0.00E+00	0.00E+00	0.00E+00
I-132	5.15E-37	6.26E-39	1.19E-08	0.00E+00	0.00E+00	5.99E-13	1.64E-13	2.82E-14	0.00E+00	0.00E+00	0.00E+00
I-133	1.37E-36	1.67E-38	2.13E-08	0.00E+00	0.00E+00	3.06E-11	5.85E-14	4.77E-14	0.00E+00	0.00E+00	0.00E+00
I-134	3.44E-37	4.19E-39	1.66E-08	0.00E+00	0.00E+00	1.46E-13	1.85E-13	4.00E-14	0.00E+00	0.00E+00	0.00E+00
I-135	1.10E-36	1.33E-38	1.89E-08	0.00E+00	0.00E+00	4.69E-12	1.94E-13	3.09E-14	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	5.05E-37	6.13E-39	7.52E-09	0.00E+00	0.00E+00	6.60E-11	1.60E-14	7.84E-15	0.00E+00	0.00E+00	0.00E+00
I-132	4.12E-37	5.01E-39	9.53E-09	0.00E+00	0.00E+00	4.79E-13	1.31E-13	2.26E-14	0.00E+00	0.00E+00	0.00E+00
I-133	1.10E-36	1.33E-38	1.71E-08	0.00E+00	0.00E+00	2.45E-11	4.68E-14	3.82E-14	0.00E+00	0.00E+00	0.00E+00
I-134	2.76E-37	3.35E-39	1.33E-08	0.00E+00	0.00E+00	1.17E-13	1.48E-13	3.20E-14	0.00E+00	0.00E+00	0.00E+00
I-135	8.77E-37	1.07E-38	1.52E-08	0.00E+00	0.00E+00	3.75E-12	1.55E-13	2.47E-14	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	9.60E-36	1.17E-37	1.43E-07	0.00E+00	0.00E+00	0.00E+00	1.81E-14	1.02E-13	0.00E+00	0.00E+00	0.00E+00
XE-133M	7.26E-35	8.83E-37	1.10E-06	0.00E+00	0.00E+00	0.00E+00	2.08E-13	9.00E-13	0.00E+00	0.00E+00	0.00E+00
XE-133	2.90E-33	3.52E-35	4.33E-05	0.00E+00	0.00E+00	0.00E+00	7.47E-12	3.35E-11	0.00E+00	0.00E+00	0.00E+00
XE-135M	3.82E-36	4.65E-38	2.90E-06	0.00E+00	0.00E+00	0.00E+00	7.05E-12	1.49E-12	0.00E+00	0.00E+00	0.00E+00
XE-135	2.37E-33	2.88E-35	3.93E-05	0.00E+00	0.00E+00	0.00E+00	5.56E-11	6.70E-11	0.00E+00	0.00E+00	0.00E+00
XE-138	2.24E-35	2.72E-37	1.11E-05	0.00E+00	0.00E+00	0.00E+00	1.83E-10	4.70E-11	0.00E+00	0.00E+00	0.00E+00
KR-83M	1.09E-34	1.32E-36	2.78E-06	0.00E+00	0.00E+00	0.00E+00	8.00E-14	5.00E-13	0.00E+00	0.00E+00	0.00E+00
KR-85M	4.16E-34	5.06E-36	7.79E-06	0.00E+00	0.00E+00	0.00E+00	6.99E-12	9.60E-12	0.00E+00	0.00E+00	0.00E+00
KR-85	1.92E-35	2.33E-37	2.84E-07	0.00E+00	0.00E+00	0.00E+00	3.43E-15	3.35E-13	0.00E+00	0.00E+00	0.00E+00
KR-87	3.68E-34	4.48E-36	1.22E-05	0.00E+00	0.00E+00	0.00E+00	9.68E-11	6.80E-11	0.00E+00	0.00E+00	0.00E+00
KR-88	9.51E-34	1.16E-35	2.03E-05	0.00E+00	0.00E+00	0.00E+00	2.04E-10	3.67E-11	0.00E+00	0.00E+00	0.00E+00
						2.37E-09	5.74E-10	2.68E-10	0.00E+00	0.00E+00	0.00E+00
						2.87E+02	1.32E+02	5.00E+01	0.00E+00	0.00E+00	0.00E+00
TOTAL DOSES 0-30 DAYS											

1 QDC CRDA, EAB, ALL REL GLAND: TID-14844: 0 - 2 h

ISOTOPE	ACTIVITY RELEASED (CURIES)	
	2. HRS	
ELEMENTAL		
I-131	1.63E+03	1.63E+03
I-132	2.41E+03	2.41E+03
I-133	3.75E+03	3.75E+03
I-134	4.35E+03	4.35E+03
I-135	3.46E+03	3.46E+03
PARTICULATE		
I-131	8.95E+01	8.95E+01
I-132	1.32E+02	1.32E+02
I-133	2.06E+02	2.06E+02
I-134	2.39E+02	2.39E+02
I-135	1.90E+02	1.90E+02
ORGANIC		
I-131	7.16E+01	7.16E+01
I-132	1.06E+02	1.06E+02
I-133	1.65E+02	1.65E+02
I-134	1.91E+02	1.91E+02
I-135	1.52E+02	1.52E+02
NOBLE GASES		
XE-131M	1.36E+03	1.36E+03

XE-133M	1.05E+04	1.05E+04
XE-133	4.13E+05	4.13E+05
XE-135M	1.09E+05	1.09E+05
XE-135	3.89E+05	3.89E+05
XE-138	3.60E+05	3.60E+05
KR-83M	3.20E+04	3.20E+04
KR-85M	8.03E+04	8.03E+04
KR-85	2.70E+03	2.70E+03
KR-87	1.54E+05	1.54E+05
KR-88	2.20E+05	2.20E+05

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 10:20:50.08

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 19:17:14.99

1 QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s
 2 2 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 2.592E6
 6 0.2402 0.
 7 9.058E-4 0.
 8 2*1.
 9 2*2460
 10 3.2E-5 0.
 11 7.00E-4 0.
 12 2*0.
 13 2*0.
 14 2*0.
 15 2*0.
 16 2*0.
 17 2*0.
 18 2*0.
 19 2*0.
 20 2*0.
 21 6*1.
 22 3*1.
 23 6.76E+3 9.73E+3 1.36E+4 1.57E+4 1.22E+4 1.21E+3 8.18E+3 3.40E+5
 24 9.21E+4 1.12E+5 3.07E+5 1.82E+4 4.99E+4 2.28E+3 9.80E+4 1.42E+5

1

QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

INITIAL CONTAINMENT INVENTORY

ISOTOPE ACTIVITY (CURIES)

I-131 6.760E+03
 I-132 9.730E+03
 I-133 1.360E+04
 I-134 1.570E+04
 I-135 1.220E+04
 XE-131M 1.210E+03
 XE-133M 8.180E+03
 XE-133 3.400E+05
 XE-135M 9.210E+04
 XE-135 1.120E+05
 XE-138 3.070E+05
 KR-83M 1.820E+04
 KR-85M 4.990E+04
 KR-85 2.280E+03
 KR-87 9.800E+04
 KR-88 1.420E+05

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QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO
 SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM
 INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .78E+02 VOL/DAY PCT PRI LKG TO ATM =
 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	3.64E+02	1.17E+03	3.92E+00	3.19E-03	6.10E-07	4.79E-02	1.16E-05	5.69E-06	5.16E-04	4.48E-09	6.13E-08
I-132	5.24E+02	1.68E+03	5.65E+00	4.58E-03	8.78E-07	3.95E-04	1.08E-04	1.86E-05	4.25E-06	3.61E-08	2.00E-07
I-133	7.32E+02	2.35E+03	7.89E+00	6.41E-03	1.23E-06	1.58E-02	3.01E-05	2.46E-05	1.70E-04	1.45E-08	2.65E-07
I-134	8.44E+02	2.71E+03	9.10E+00	7.39E-03	1.41E-06	1.11E-04	1.41E-04	3.05E-05	1.20E-06	6.24E-08	3.28E-07

I-135	6.57E+02	2.11E+03	7.08E+00	5.75E-03	1.10E-06	2.44E-03	1.01E-04	1.60E-05	2.62E-05	2.64E-08	1.73E-07	
PARTICULATE												
I-131	2.00E+01	6.43E+01	2.16E-01	1.75E-04	3.35E-08	2.63E-03	6.40E-07	3.13E-07	2.84E-05	2.46E-10	3.37E-09	
I-132	2.88E+01	9.25E+01	3.10E-01	2.52E-04	4.82E-08	2.17E-05	5.96E-06	1.02E-06	2.34E-07	1.98E-09	1.10E-08	
I-133	4.02E+01	1.29E+02	4.34E-01	3.52E-04	6.74E-08	8.67E-04	1.65E-06	1.35E-06	9.34E-06	7.98E-10	1.45E-08	
I-134	4.64E+01	1.49E+02	5.00E-01	4.06E-04	7.77E-08	6.11E-06	7.76E-06	1.68E-06	6.58E-08	3.43E-09	1.80E-08	
I-135	3.61E+01	1.16E+02	3.89E-01	3.16E-04	6.05E-08	1.34E-04	5.54E-06	8.82E-07	1.44E-06	1.45E-09	9.50E-09	
ORGANIC												
I-131	1.60E+01	5.14E+01	1.72E-01	1.40E-04	2.68E-08	2.11E-03	5.12E-07	2.50E-07	2.27E-05	1.97E-10	2.69E-09	
I-132	2.30E+01	7.40E+01	2.48E-01	2.02E-04	3.86E-08	1.74E-05	4.76E-06	8.18E-07	1.87E-07	1.58E-09	8.81E-09	
I-133	3.22E+01	1.03E+02	3.47E-01	2.82E-04	5.39E-08	6.93E-04	1.32E-06	1.08E-06	7.47E-06	6.38E-10	1.16E-08	
I-134	3.71E+01	1.19E+02	4.00E-01	3.25E-04	6.22E-08	4.89E-06	6.21E-06	1.34E-06	5.26E-08	2.74E-09	1.44E-08	
I-135	2.89E+01	9.28E+01	3.11E-01	2.53E-04	4.84E-08	1.07E-04	4.43E-06	7.05E-07	1.15E-06	1.16E-09	7.60E-09	
NOBLE GASES												
XE-131M	2.86E+02	9.21E+02	3.09E+00	2.51E-03	4.80E-07	0.00E+00	5.43E-07	3.07E-06	0.00E+00	9.15E-10	3.30E-08	
XE-133M	1.94E+03	6.22E+03	2.09E+01	1.70E-02	3.24E-06	0.00E+00	5.51E-06	2.38E-05	0.00E+00	2.73E-09	2.56E-07	
XE-133	8.05E+04	2.59E+05	8.67E+02	7.05E-01	1.35E-04	0.00E+00	2.08E-04	9.32E-04	0.00E+00	2.54E-07	1.00E-05	
XE-135M	2.17E+04	6.98E+04	2.34E+02	1.90E-01	3.64E-05	0.00E+00	7.91E-04	1.67E-04	0.00E+00	3.12E-07	1.80E-06	
XE-135	2.65E+04	8.52E+04	2.86E+02	2.32E-01	4.44E-05	0.00E+00	5.62E-04	6.77E-04	0.00E+00	2.16E-07	7.29E-06	
XE-138	7.24E+04	2.33E+05	7.81E+02	6.34E-01	1.21E-04	0.00E+00	1.79E-02	4.60E-03	0.00E+00	1.83E-06	4.95E-05	
KR-83M	4.30E+03	1.38E+04	4.64E+01	3.77E-02	7.21E-06	0.00E+00	1.86E-06	1.16E-05	0.00E+00	1.09E-08	1.25E-07	
KR-85M	1.18E+04	3.80E+04	1.27E+02	1.03E-01	1.98E-05	0.00E+00	1.59E-04	2.18E-04	0.00E+00	6.57E-08	2.35E-06	
KR-85	5.40E+02	1.73E+03	5.82E+00	4.72E-03	9.04E-07	0.00E+00	9.77E-08	9.55E-06	0.00E+00	3.85E-11	1.03E-07	
KR-87	2.32E+04	7.45E+04	2.50E+02	2.03E-01	3.88E-05	0.00E+00	2.75E-03	1.93E-03	0.00E+00	5.27E-07	2.08E-05	
KR-88	3.36E+04	1.08E+05	3.62E+02	2.94E-01	5.63E-05	0.00E+00	5.05E-03	9.09E-04	0.00E+00	1.67E-06	9.79E-06	
							7.32E-02	2.79E-02	9.59E-03	7.89E-04	5.04E-06	1.03E-04

1 QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 720.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)			
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA	
ELEMENTAL												
I-131	2.75E+01	8.83E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E+00	9.05E-06	1.24E-04	
I-132	3.15E-92	1.01E-91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.27E-03	5.32E-05	2.96E-04	
I-133	3.48E-08	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-01	2.83E-05	5.16E-04	
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-03	6.34E-05	3.33E-04	
I-135	3.24E-30	1.04E-29	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.72E-02	4.75E-05	3.11E-04	
PARTICULATE												
I-131	1.51E+00	4.85E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.73E-02	4.97E-07	6.80E-06	
I-132	1.73E-93	5.57E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E-04	2.92E-06	1.62E-05	
I-133	1.91E-09	6.15E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.82E-02	1.56E-06	2.83E-05	
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.68E-05	3.48E-06	1.83E-05	
I-135	1.78E-31	5.72E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.59E-03	2.61E-06	1.71E-05	
ORGANIC												
I-131	1.21E+00	3.88E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-02	3.98E-07	5.44E-06	
I-132	1.39E-93	4.46E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-04	2.34E-06	1.30E-05	
I-133	1.53E-09	4.92E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-02	1.24E-06	2.27E-05	
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-05	2.79E-06	1.47E-05	
I-135	1.42E-31	4.57E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-03	2.09E-06	1.37E-05	
NOBLE GASES												
XE-131M	4.93E+01	1.58E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-06	6.69E-05	
XE-133M	1.95E-01	6.28E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.45E-06	5.12E-04	
XE-133	1.57E+03	5.03E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.12E-04	2.02E-02	
XE-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04	8.43E-04	
XE-135	4.69E-20	1.51E-19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.01E-04	1.35E-02	
XE-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.34E-04	2.53E-02	
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-05	1.73E-04	
KR-85M	5.85E-46	1.88E-45	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	3.99E-03	
KR-85	5.37E+02	1.73E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.81E-08	2.09E-04	
KR-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-04	2.51E-02	
KR-88	1.20E-73	3.85E-73	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-03	1.52E-02	
							0.00E+00	0.00E+00	0.00E+00	1.57E+00	5.57E-03	1.07E-01

TOTAL DOSES 0-30 DAYS ===== ===== ===== ===== ===== =====
 7.32E-02 2.79E-02 9.59E-03 1.57E+00 5.57E-03 1.07E-01

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QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

ISOTOPE	ACTIVITY RELEASED (CURIES)		
	0. HRS	720. HRS	
ELEMENTAL			
I-131	3.92E+00	0.00E+00	3.92E+00
I-132	5.65E+00	0.00E+00	5.65E+00
I-133	7.89E+00	0.00E+00	7.89E+00
I-134	9.10E+00	0.00E+00	9.10E+00
I-135	7.08E+00	0.00E+00	7.08E+00
PARTICULATE			
I-131	2.16E-01	0.00E+00	2.16E-01
I-132	3.10E-01	0.00E+00	3.10E-01
I-133	4.34E-01	0.00E+00	4.34E-01
I-134	5.00E-01	0.00E+00	5.00E-01
I-135	3.89E-01	0.00E+00	3.89E-01
ORGANIC			
I-131	1.72E-01	0.00E+00	1.72E-01
I-132	2.48E-01	0.00E+00	2.48E-01
I-133	3.47E-01	0.00E+00	3.47E-01
I-134	4.00E-01	0.00E+00	4.00E-01
I-135	3.11E-01	0.00E+00	3.11E-01
NOBLE GASES			
XE-131M	3.09E+00	0.00E+00	3.09E+00
XE-133M	2.09E+01	0.00E+00	2.09E+01
XE-133	8.67E+02	0.00E+00	8.67E+02
XE-135M	2.34E+02	0.00E+00	2.34E+02
XE-135	2.86E+02	0.00E+00	2.86E+02
XE-138	7.81E+02	0.00E+00	7.81E+02
KR-83M	4.64E+01	0.00E+00	4.64E+01
KR-85M	1.27E+02	0.00E+00	1.27E+02
KR-85	5.82E+00	0.00E+00	5.82E+00
KR-87	2.50E+02	0.00E+00	2.50E+02
KR-88	3.62E+02	0.00E+00	3.62E+02

END EXECUTION DATE: 11/18/1999
 END EXECUTION TIME: 19:17:15.05

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 19:17:22.90

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d
 2 6 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 1800 7200 2.88+4 8.64+4 2.592E6
 6 0.2402 4*1.201E-2 0.
 7 5*1. 0.
 8 6*1.
 9 6*2460
 10 2*3.2E-5 2*9.0E-6 3.0E-6 0.
 11 3*7.00E-4 6.45E-6 3.81E-6 0.
 12 6*0.
 13 6*0.
 14 6*0.
 15 6*0.
 16 6*0.
 17 6*0.
 18 6*0.
 19 6*0.
 20 6*0.
 21 6*1.
 22 3*1.
 23 6.76E+3 9.73E+3 1.36E+4 1.57E+4 1.22E+4 1.21E+3 8.18E+3 3.40E+5
 24 9.21E+4 1.12E+5 3.07E+5 1.82E+4 4.99E+4 2.28E+3 9.80E+4 1.42E+5

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QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	6.760E+03
I-132	9.730E+03
I-133	1.360E+04
I-134	1.570E+04
I-135	1.220E+04
XE-131M	1.210E+03
XE-133M	8.180E+03
XE-133	3.400E+05
XE-135M	9.210E+04
XE-135	1.120E+05
XE-138	3.070E+05
KR-83M	1.820E+04
KR-85M	4.990E+04
KR-85	2.280E+03
KR-87	9.800E+04
KR-88	1.420E+05

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QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH BODY	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	3.64E+02	1.14E+02	1.06E+03	8.61E-01	1.65E-04	1.29E+01	3.15E-03	1.54E-03	1.95E-01	1.69E-06	2.31E-05
I-132	5.24E+02	1.64E+02	1.53E+03	1.24E+00	2.37E-04	1.07E-01	2.93E-02	5.03E-03	1.60E-03	1.36E-05	7.56E-05
I-133	7.32E+02	2.29E+02	2.13E+03	1.73E+00	3.32E-04	4.26E+00	8.14E-03	6.64E-03	6.41E-02	5.48E-06	9.98E-05
I-134	8.44E+02	2.64E+02	2.46E+03	2.00E+00	3.82E-04	3.01E-02	3.82E-02	8.24E-03	4.52E-04	2.36E-05	1.24E-04

Table with 12 columns of numerical data (scientific notation) for various categories: PARTICULATE, ORGANIC, NOBLE GASES, and KR-85M. Includes sub-headers like I-131, I-132, I-133, I-134, I-135, and XE-131M.

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO

SPRAYED VOL

AT .500 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =

00.00

Table with 7 columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Rows include ELEMENTAL, PARTICULATE, and ORGANIC.

Table with 12 columns: ISOTOPE, ACTIVITY (CURIES), CONTROL ROOM, SITE BOUNDARY DOSES (REM), CONTROL ROOM DOSES (REM). Rows include ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES.

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 2.000 HOURS: X/Q(SITE)= .90E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Includes sub-tables for ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES with various isotope activity and dose data.

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 8.000 HOURS: X/Q(SITE)= .90E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .65E-05 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Includes sub-tables for ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES with various isotope activity and dose data.

ELEMENTAL												
I-131	0.00E+00	0.00E+00	1.10E-35	2.03E-03	3.88E-07	3.77E-38	9.15E-42	4.47E-42	8.18E+01	7.09E-04	9.71E-03	
I-132	0.00E+00	0.00E+00	8.64E-36	2.70E-04	5.16E-08	1.70E-40	4.67E-41	8.02E-42	2.73E-01	2.31E-03	1.29E-02	
I-133	0.00E+00	0.00E+00	2.08E-35	3.23E-03	6.17E-07	1.17E-38	2.23E-41	1.82E-41	2.45E+01	2.09E-03	3.82E-02	
I-134	0.00E+00	0.00E+00	5.09E-36	8.11E-06	1.55E-09	1.75E-41	2.22E-41	4.80E-42	1.96E-02	1.02E-03	5.37E-03	
I-135	0.00E+00	0.00E+00	1.62E-35	1.65E-03	3.16E-07	1.57E-39	6.48E-41	1.03E-41	3.04E+00	3.06E-03	2.00E-02	
PARTICULATE												
I-131	0.00E+00	0.00E+00	6.03E-37	1.11E-04	2.13E-08	2.07E-39	5.03E-43	2.46E-43	4.49E+00	3.90E-05	5.33E-04	
I-132	0.00E+00	0.00E+00	4.75E-37	1.48E-05	2.84E-09	9.34E-42	2.56E-42	4.40E-43	1.50E-02	1.27E-04	7.07E-04	
I-133	0.00E+00	0.00E+00	1.14E-36	1.77E-04	3.39E-08	6.42E-40	1.23E-42	1.00E-42	1.35E+00	1.15E-04	2.10E-03	
I-134	0.00E+00	0.00E+00	2.80E-37	4.46E-07	8.53E-11	9.62E-43	1.22E-42	2.64E-43	1.08E-03	5.61E-05	2.95E-04	
I-135	0.00E+00	0.00E+00	8.89E-37	9.06E-05	1.73E-08	8.60E-41	3.56E-42	5.67E-43	1.67E-01	1.68E-04	1.10E-03	
ORGANIC												
I-131	0.00E+00	0.00E+00	4.82E-37	8.92E-05	1.71E-08	1.66E-39	4.02E-43	1.97E-43	3.59E+00	3.12E-05	4.27E-04	
I-132	0.00E+00	0.00E+00	3.80E-37	1.19E-05	2.27E-09	7.47E-42	2.05E-42	3.52E-43	1.20E-02	1.02E-04	5.66E-04	
I-133	0.00E+00	0.00E+00	9.14E-37	1.42E-04	2.71E-08	5.14E-40	9.81E-43	8.00E-43	1.08E+00	9.21E-05	1.68E-03	
I-134	0.00E+00	0.00E+00	2.24E-37	3.56E-07	6.82E-11	7.69E-43	9.77E-43	2.11E-43	8.61E-04	4.49E-05	2.36E-04	
I-135	0.00E+00	0.00E+00	7.11E-37	7.25E-05	1.39E-08	6.88E-41	2.85E-42	4.53E-43	1.35E-01	1.35E-04	8.81E-04	
NOBLE GASES												
XE-131M	0.00E+00	0.00E+00	8.65E-36	1.61E-03	3.08E-07	0.00E+00	4.28E-43	2.42E-42	0.00E+00	1.46E-04	5.25E-03	
XE-133M	0.00E+00	0.00E+00	5.73E-35	1.00E-02	1.92E-06	0.00E+00	4.25E-42	1.84E-41	0.00E+00	4.20E-04	3.95E-02	
XE-133	0.00E+00	0.00E+00	2.42E-33	4.42E-01	8.46E-05	0.00E+00	1.63E-40	7.30E-40	0.00E+00	4.00E-02	1.58E+00	
XE-135M	0.00E+00	0.00E+00	3.02E-36	6.94E-11	1.33E-14	0.00E+00	2.87E-42	6.07E-43	0.00E+00	5.68E-05	3.27E-04	
XE-135	0.00E+00	0.00E+00	6.90E-34	8.28E-02	1.59E-05	0.00E+00	3.82E-40	4.60E-40	0.00E+00	2.73E-02	9.20E-01	
XE-138	0.00E+00	0.00E+00	1.80E-35	2.32E-09	4.43E-13	0.00E+00	1.17E-40	2.99E-41	0.00E+00	6.45E-04	1.75E-02	
KR-83M	0.00E+00	0.00E+00	6.17E-35	1.27E-03	2.44E-07	0.00E+00	6.95E-43	4.35E-42	0.00E+00	5.75E-04	6.58E-03	
KR-85M	0.00E+00	0.00E+00	2.61E-34	1.92E-02	3.67E-06	0.00E+00	9.15E-41	1.26E-40	0.00E+00	6.45E-03	2.31E-01	
KR-85	0.00E+00	0.00E+00	1.64E-35	3.10E-03	5.92E-07	0.00E+00	7.74E-44	7.56E-42	0.00E+00	6.16E-06	1.65E-02	
KR-87	0.00E+00	0.00E+00	2.33E-34	1.67E-03	3.20E-07	0.00E+00	7.20E-40	5.06E-40	0.00E+00	1.69E-02	6.68E-01	
KR-88	0.00E+00	0.00E+00	6.18E-34	2.66E-02	5.09E-06	0.00E+00	2.42E-39	4.36E-40	0.00E+00	1.25E-01	7.35E-01	
							5.62E-38	4.09E-39	2.37E-39	1.20E+02	2.28E-01	4.32E+00

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 24.000 HOURS: X/Q(SITE)= .30E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .38E-05 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS		
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER	
ELEMENTAL	.000	.000	.000	.000	1.000	1.000	
PARTICULATE	.000	.000	.000	.000	1.000	1.000	
ORGANIC	.000	.000	.000	.000	1.000	1.000	

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)			SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH	BODY	BETA	THYROID	WH	BODY	BETA	
ELEMENTAL												
I-131	0.00E+00	0.00E+00	0.00E+00	5.29E-09	1.01E-12	0.00E+00	0.00E+00	0.00E+00	6.64E-01	5.76E-06	7.88E-05	
I-132	0.00E+00	0.00E+00	0.00E+00	6.00E-12	1.15E-15	0.00E+00	0.00E+00	0.00E+00	3.69E-04	3.13E-06	1.74E-05	
I-133	0.00E+00	0.00E+00	0.00E+00	5.25E-09	1.01E-12	0.00E+00	0.00E+00	0.00E+00	1.67E-01	1.42E-05	2.60E-04	
I-134	0.00E+00	0.00E+00	0.00E+00	6.26E-17	1.20E-20	0.00E+00	0.00E+00	0.00E+00	1.33E-06	6.95E-08	3.66E-07	
I-135	0.00E+00	0.00E+00	0.00E+00	8.71E-10	1.67E-13	0.00E+00	0.00E+00	0.00E+00	1.35E-02	1.36E-05	8.91E-05	
PARTICULATE												
I-131	0.00E+00	0.00E+00	0.00E+00	2.91E-10	5.56E-14	0.00E+00	0.00E+00	0.00E+00	3.65E-02	3.16E-07	4.33E-06	
I-132	0.00E+00	0.00E+00	0.00E+00	3.30E-13	6.31E-17	0.00E+00	0.00E+00	0.00E+00	2.03E-05	1.72E-07	9.56E-07	
I-133	0.00E+00	0.00E+00	0.00E+00	2.89E-10	5.52E-14	0.00E+00	0.00E+00	0.00E+00	9.16E-03	7.82E-07	1.43E-05	
I-134	0.00E+00	0.00E+00	0.00E+00	3.44E-18	6.58E-22	0.00E+00	0.00E+00	0.00E+00	7.33E-08	3.82E-09	2.01E-08	
I-135	0.00E+00	0.00E+00	0.00E+00	4.79E-11	9.16E-15	0.00E+00	0.00E+00	0.00E+00	7.43E-04	7.48E-07	4.90E-06	
ORGANIC												
I-131	0.00E+00	0.00E+00	0.00E+00	2.32E-10	4.45E-14	0.00E+00	0.00E+00	0.00E+00	2.92E-02	2.53E-07	3.46E-06	
I-132	0.00E+00	0.00E+00	0.00E+00	2.64E-13	5.05E-17	0.00E+00	0.00E+00	0.00E+00	1.62E-05	1.37E-07	7.64E-07	
I-133	0.00E+00	0.00E+00	0.00E+00	2.31E-10	4.42E-14	0.00E+00	0.00E+00	0.00E+00	7.33E-03	6.26E-07	1.14E-05	
I-134	0.00E+00	0.00E+00	0.00E+00	2.75E-18	5.27E-22	0.00E+00	0.00E+00	0.00E+00	5.86E-08	3.06E-09	1.61E-08	
I-135	0.00E+00	0.00E+00	0.00E+00	3.83E-11	7.33E-15	0.00E+00	0.00E+00	0.00E+00	5.95E-04	5.98E-07	3.92E-06	
NOBLE GASES												
XE-131M	0.00E+00	0.00E+00	0.00E+00	4.28E-09	8.19E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-06	4.30E-05	
XE-133M	0.00E+00	0.00E+00	0.00E+00	2.26E-08	4.32E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-06	3.03E-04	
XE-133	0.00E+00	0.00E+00	0.00E+00	1.12E-06	2.14E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-04	1.27E-02	
XE-135M	0.00E+00	0.00E+00	0.00E+00	5.90E-35	1.13E-38	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-14	3.08E-13	
XE-135	0.00E+00	0.00E+00	0.00E+00	6.78E-08	1.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-04	4.82E-03	
XE-138	0.00E+00	0.00E+00	0.00E+00	1.98E-31	3.78E-35	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.42E-12	9.25E-11	
KR-83M	0.00E+00	0.00E+00	0.00E+00	9.31E-12	1.78E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.12E-07	5.86E-06	
KR-85M	0.00E+00	0.00E+00	0.00E+00	4.25E-09	8.14E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-05	7.40E-04	
KR-85	0.00E+00	0.00E+00	0.00E+00	8.54E-09	1.64E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.12E-08	1.37E-04	

KR-87	0.00E+00	0.00E+00	0.00E+00	7.27E-13	1.39E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-06	2.06E-04
KR-88	0.00E+00	0.00E+00	0.00E+00	1.39E-09	2.67E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-04	1.37E-03
						0.00E+00	0.00E+00	0.00E+00	9.28E-01	7.69E-04	2.08E-02

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 720.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM = 00.00

ISOTOPE	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS			ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)			SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA	
ELEMENTAL																			
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	1.73E-06	1.50E-11	2.05E-10	0.00E+00	0.00E+00	0.00E+00	8.21E-12	6.96E-14	3.87E-13	
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	2.71E-07	2.32E-11	4.23E-10	0.00E+00	0.00E+00	0.00E+00	4.51E-13	3.82E-15	2.13E-14	
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	2.71E-07	2.32E-11	4.23E-10	0.00E+00	0.00E+00	0.00E+00	1.49E-08	1.27E-12	2.32E-11	
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	1.03E-17	5.37E-19	2.82E-18	0.00E+00	0.00E+00	0.00E+00	5.66E-19	2.95E-20	1.55E-19	
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	7.15E-09	7.19E-12	4.71E-11	0.00E+00	0.00E+00	0.00E+00	3.93E-10	3.95E-13	2.59E-12	
PARTICULATE																			
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	9.51E-08	8.25E-13	1.13E-11	0.00E+00	0.00E+00	0.00E+00	4.51E-13	3.82E-15	2.13E-14	
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	4.51E-13	3.82E-15	2.13E-14	0.00E+00	0.00E+00	0.00E+00	1.49E-08	1.27E-12	2.32E-11	
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	1.49E-08	1.27E-12	2.32E-11	0.00E+00	0.00E+00	0.00E+00	5.66E-19	2.95E-20	1.55E-19	
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	5.66E-19	2.95E-20	1.55E-19	0.00E+00	0.00E+00	0.00E+00	3.93E-10	3.95E-13	2.59E-12	
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	3.93E-10	3.95E-13	2.59E-12	0.00E+00	0.00E+00	0.00E+00	7.61E-08	6.60E-13	9.03E-12	
ORGANIC																			
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	7.61E-08	6.60E-13	9.03E-12	0.00E+00	0.00E+00	0.00E+00	3.61E-13	3.06E-15	1.70E-14	
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	3.61E-13	3.06E-15	1.70E-14	0.00E+00	0.00E+00	0.00E+00	1.19E-08	1.02E-12	1.86E-11	
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	1.19E-08	1.02E-12	1.86E-11	0.00E+00	0.00E+00	0.00E+00	4.53E-19	2.36E-20	1.24E-19	
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	4.53E-19	2.36E-20	1.24E-19	0.00E+00	0.00E+00	0.00E+00	3.14E-10	3.16E-13	2.07E-12	
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	3.14E-10	3.16E-13	2.07E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-12	1.14E-10	
NOBLE GASES																			
XE-131M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.26E-12	6.82E-10	
XE-133M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	7.26E-12	6.82E-10	3.21E-08	0.00E+00	0.00E+00	0.00E+00	8.12E-10	3.21E-08	4.54E-38	
XE-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	8.12E-10	3.21E-08	4.54E-38	0.00E+00	0.00E+00	0.00E+00	4.54E-38	2.62E-37	7.89E-33	
XE-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	4.54E-38	2.62E-37	7.89E-33	0.00E+00	0.00E+00	0.00E+00	1.17E-10	3.95E-09	0.00E+00	
XE-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	1.17E-10	3.95E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-34	7.89E-33	0.00E+00	
XE-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	2.91E-34	7.89E-33	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-15	4.29E-14	0.00E+00	
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	3.75E-15	4.29E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.58E-12	1.64E-10	0.00E+00	
KR-85M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	4.58E-12	1.64E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-13	3.77E-10	0.00E+00	
KR-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	1.41E-13	3.77E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-15	8.98E-14	0.00E+00	
KR-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	2.28E-15	8.98E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-11	7.19E-11	0.00E+00	
KR-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.000	1.000	0.00E+00	0.00E+00	0.00E+00	1.22E-11	7.19E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
TOTAL DOSES 0-30 DAYS																			
							2.87E+01	1.08E+01	3.73E+00	6.16E+02	2.18E+00	4.17E+01							

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

ISOTOPE	ACTIVITY RELEASED (CURIES)			
	2. HRS	8. HRS	24. HRS	720. HRS
ELEMENTAL				
I-131	1.54E+03	1.10E-35	0.00E+00	0.00E+00
I-132	2.21E+03	8.64E-36	0.00E+00	0.00E+00
I-133	3.09E+03	2.08E-35	0.00E+00	0.00E+00
I-134	3.55E+03	5.09E-36	0.00E+00	0.00E+00
I-135	2.77E+03	1.62E-35	0.00E+00	0.00E+00
PARTICULATE				
I-131	8.45E+01	6.03E-37	0.00E+00	0.00E+00
I-132	1.21E+02	4.75E-37	0.00E+00	0.00E+00
I-133	1.70E+02	1.14E-36	0.00E+00	0.00E+00
I-134	1.95E+02	2.80E-37	0.00E+00	0.00E+00
I-135	1.52E+02	8.89E-37	0.00E+00	0.00E+00
ORGANIC				
I-131	6.76E+01	4.82E-37	0.00E+00	0.00E+00
I-132	9.71E+01	3.80E-37	0.00E+00	0.00E+00

I-133	1.36E+02	9.14E-37	0.00E+00	0.00E+00	1.36E+02
I-134	1.56E+02	2.24E-37	0.00E+00	0.00E+00	1.56E+02
I-135	1.22E+02	7.11E-37	0.00E+00	0.00E+00	1.22E+02
NOBLE GASES					
XE-131M	1.21E+03	8.65E-36	0.00E+00	0.00E+00	1.21E+03
XE-133M	8.18E+03	5.73E-35	0.00E+00	0.00E+00	8.18E+03
XE-133	3.40E+05	2.42E-33	0.00E+00	0.00E+00	3.40E+05
XE-135M	9.06E+04	3.02E-36	0.00E+00	0.00E+00	9.06E+04
XE-135	1.12E+05	6.90E-34	0.00E+00	0.00E+00	1.12E+05
XE-138	3.02E+05	1.80E-35	0.00E+00	0.00E+00	3.02E+05
KR-83M	1.82E+04	6.17E-35	0.00E+00	0.00E+00	1.82E+04
KR-85M	4.98E+04	2.61E-34	0.00E+00	0.00E+00	4.98E+04
KR-85	2.28E+03	1.64E-35	0.00E+00	0.00E+00	2.28E+03
KR-87	9.76E+04	2.33E-34	0.00E+00	0.00E+00	9.76E+04
KR-88	1.42E+05	6.18E-34	0.00E+00	0.00E+00	1.42E+05

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 19:17:23.12

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 19:17:30.43

1 QDC CRDA, EAB, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s
 2 2 1 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 7200
 6 0.2402 0.
 7 9.058E-4 0.
 8 2*1.
 9 2*0.
 10 2.9E-4 0.
 11 2*0.
 12 2*0.
 13 2*0.
 14 2*0.
 15 2*0.
 16 2*0.
 17 2*0.
 18 2*0.
 19 2*0.
 20 2*0.
 21 6*1.
 22 3*1.
 23 6.76E+3 9.73E+3 1.36E+4 1.57E+4 1.22E+4 1.21E+3 8.18E+3 3.40E+5
 24 9.21E+4 1.12E+5 3.07E+5 1.82E+4 4.99E+4 2.28E+3 9.80E+4 1.42E+5

1

QDC CRDA, EAB, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

INITIAL CONTAINMENT INVENTORY

ISOTOPE ACTIVITY (CURIES)

I-131 6.760E+03
 I-132 9.730E+03
 I-133 1.360E+04
 I-134 1.570E+04
 I-135 1.220E+04
 XE-131M 1.210E+03
 XE-133M 8.180E+03
 XE-133 3.400E+05
 XE-135M 9.210E+04
 XE-135 1.120E+05
 XE-138 3.070E+05
 KR-83M 1.820E+04
 KR-85M 4.990E+04
 KR-85 2.280E+03
 KR-87 9.800E+04
 KR-88 1.420E+05

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QDC CRDA, EAB, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO
 SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=
 .0 CFM
 X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .78E+02 VOL/DAY PCT PRI LKG TO ATM =
 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	3.64E+02	1.17E+03	3.92E+00	0.00E+00	0.00E+00	4.34E-01	1.06E-04	5.16E-05	0.00E+00	0.00E+00	0.00E+00
I-132	5.24E+02	1.68E+03	5.65E+00	0.00E+00	0.00E+00	3.58E-03	9.82E-04	1.69E-04	0.00E+00	0.00E+00	0.00E+00
I-133	7.32E+02	2.35E+03	7.89E+00	0.00E+00	0.00E+00	1.43E-01	2.73E-04	2.23E-04	0.00E+00	0.00E+00	0.00E+00
I-134	8.44E+02	2.71E+03	9.10E+00	0.00E+00	0.00E+00	1.01E-03	1.28E-03	2.76E-04	0.00E+00	0.00E+00	0.00E+00

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TOTAL DOSES 0-30 DAYS ===== ===== ===== ===== ===== =====
 6.64E-01 2.53E-01 8.69E-02 0.00E+00 0.00E+00 0.00E+00

QDC CRDA, EAB, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

ISOTOPE	ACTIVITY RELEASED (CURIES)	
	2. HRS	
ELEMENTAL		
I-131	3.92E+00	3.92E+00
I-132	5.65E+00	5.65E+00
I-133	7.89E+00	7.89E+00
I-134	9.10E+00	9.10E+00
I-135	7.08E+00	7.08E+00
PARTICULATE		
I-131	2.16E-01	2.16E-01
I-132	3.10E-01	3.10E-01
I-133	4.34E-01	4.34E-01
I-134	5.00E-01	5.00E-01
I-135	3.89E-01	3.89E-01
ORGANIC		
I-131	1.72E-01	1.72E-01
I-132	2.48E-01	2.48E-01
I-133	3.47E-01	3.47E-01
I-134	4.00E-01	4.00E-01
I-135	3.11E-01	3.11E-01
NOBLE GASES		
XE-131M	3.09E+00	3.09E+00
XE-133M	2.09E+01	2.09E+01
XE-133	8.67E+02	8.67E+02
XE-135M	2.34E+02	2.34E+02
XE-135	2.86E+02	2.86E+02
XE-138	7.81E+02	7.81E+02
KR-83M	4.64E+01	4.64E+01
KR-85M	1.27E+02	1.27E+02
KR-85	5.82E+00	5.82E+00
KR-87	2.50E+02	2.50E+02
KR-88	3.62E+02	3.62E+02

END EXECUTION DATE: 11/18/1999
 END EXECUTION TIME: 19:17:30.43

AXIDENT VER 2 MOD 4
PRODUCTION DATE 02/18/92
BEGIN EXECUTION DATE: 11/18/1999
BEGIN EXECUTION TIME: 19:17:43.83

1 QDC CRDA, EAB, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 2 h
2 3 2 1. 1.
3 -2561 2.60+6 1.845+5 5.83+4
4 0. 0. 0. 1. 1. 2.78+5 0.
5 6 1800 7200
6 0.2402 2*1.201E-2
7 3*1.
8 3*1.
9 3*0.
10 2*2.9e-4 2.3E-5
11 3*0.
12 3*0.
13 3*0.
14 3*0.
15 3*0.
16 3*0.
17 3*0.
18 3*0.
19 3*0.
20 3*0.
21 6*1.
22 3*1.
23 6.76E+3 9.73E+3 1.36E+4 1.57E+4 1.22E+4 1.21E+3 8.18E+3 3.40E+5
24 9.21E+4 1.12E+5 3.07E+5 1.82E+4 4.99E+4 2.28E+3 9.80E+4 1.42E+5

1

QDC CRDA, EAB, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 2 h

INITIAL CONTAINMENT INVENTORY

ISOTOPE ACTIVITY (CURIES)

I-131 6.760E+03
I-132 9.730E+03
I-133 1.360E+04
I-134 1.570E+04
I-135 1.220E+04
XE-131M 1.210E+03
XE-133M 8.180E+03
XE-133 3.400E+05
XE-135M 9.210E+04
XE-135 1.120E+05
XE-138 3.070E+05
KR-83M 1.820E+04
KR-85M 4.990E+04
KR-85 2.280E+03
KR-87 9.800E+04
KR-88 1.420E+05

1

QDC CRDA, EAB, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=.0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Rows include ELEMENTAL, PARTICULATE, and ORGANIC with sub-columns for SPRAY, PRIMARY, SECONDARY, CONT CENTER, RELEASE, and CONT CENTER.

Table with columns: ACTIVITY (CURIES), CONTROL ROOM, and SITE BOUNDARY DOSES (REM). Rows include ISOTOPE (I-131, I-132, I-133, I-134) and ELEMENTAL with sub-columns for PRIMARY, SECONDARY, RELEASE, CONTROL ROOM (CURIES, UCI/CM3), and SITE BOUNDARY DOSES (THYROID, WH BODY, BETA).

I-135	6.57E+02	2.05E+02	1.91E+03	0.00E+00	0.00E+00	5.97E+00	2.47E-01	3.93E-02	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	2.00E+01	6.26E+00	5.82E+01	0.00E+00	0.00E+00	6.45E+00	1.57E-03	7.65E-04	0.00E+00	0.00E+00	0.00E+00
I-132	2.88E+01	9.00E+00	8.38E+01	0.00E+00	0.00E+00	5.31E-02	1.46E-02	2.50E-03	0.00E+00	0.00E+00	0.00E+00
I-133	4.02E+01	1.26E+01	1.17E+02	0.00E+00	0.00E+00	2.12E+00	4.05E-03	3.31E-03	0.00E+00	0.00E+00	0.00E+00
I-134	4.64E+01	1.45E+01	1.35E+02	0.00E+00	0.00E+00	1.50E-02	1.90E-02	4.10E-03	0.00E+00	0.00E+00	0.00E+00
I-135	3.61E+01	1.13E+01	1.05E+02	0.00E+00	0.00E+00	3.28E-01	1.36E-02	2.16E-03	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	1.60E+01	5.00E+00	4.66E+01	0.00E+00	0.00E+00	5.16E+00	1.25E-03	6.12E-04	0.00E+00	0.00E+00	0.00E+00
I-132	2.30E+01	7.20E+00	6.71E+01	0.00E+00	0.00E+00	4.25E-02	1.17E-02	2.00E-03	0.00E+00	0.00E+00	0.00E+00
I-133	3.22E+01	1.01E+01	9.37E+01	0.00E+00	0.00E+00	1.70E+00	3.24E-03	2.64E-03	0.00E+00	0.00E+00	0.00E+00
I-134	3.71E+01	1.16E+01	1.08E+02	0.00E+00	0.00E+00	1.20E-02	1.52E-02	3.28E-03	0.00E+00	0.00E+00	0.00E+00
I-135	2.89E+01	9.03E+00	8.41E+01	0.00E+00	0.00E+00	2.62E-01	1.08E-02	1.73E-03	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	2.86E+02	8.96E+01	8.34E+02	0.00E+00	0.00E+00	0.00E+00	1.33E-03	7.51E-03	0.00E+00	0.00E+00	0.00E+00
XE-133M	1.94E+03	6.06E+02	5.64E+03	0.00E+00	0.00E+00	0.00E+00	1.35E-02	5.83E-02	0.00E+00	0.00E+00	0.00E+00
XE-133	8.05E+04	2.52E+04	2.34E+05	0.00E+00	0.00E+00	0.00E+00	5.10E-01	2.28E+00	0.00E+00	0.00E+00	0.00E+00
XE-135M	2.17E+04	6.79E+03	6.34E+04	0.00E+00	0.00E+00	0.00E+00	1.94E+00	4.10E-01	0.00E+00	0.00E+00	0.00E+00
XE-135	2.65E+04	8.29E+03	7.72E+04	0.00E+00	0.00E+00	0.00E+00	1.38E+00	1.66E+00	0.00E+00	0.00E+00	0.00E+00
XE-138	7.24E+04	2.26E+04	2.11E+05	0.00E+00	0.00E+00	0.00E+00	4.39E+01	1.13E+01	0.00E+00	0.00E+00	0.00E+00
KR-83M	4.30E+03	1.35E+03	1.25E+04	0.00E+00	0.00E+00	0.00E+00	4.55E-03	2.84E-02	0.00E+00	0.00E+00	0.00E+00
KR-85M	1.18E+04	3.69E+03	3.44E+04	0.00E+00	0.00E+00	0.00E+00	3.89E-01	5.35E-01	0.00E+00	0.00E+00	0.00E+00
KR-85	5.40E+02	1.69E+02	1.57E+03	0.00E+00	0.00E+00	0.00E+00	2.39E-04	2.34E-02	0.00E+00	0.00E+00	0.00E+00
KR-87	2.32E+04	7.25E+03	6.75E+04	0.00E+00	0.00E+00	0.00E+00	6.73E+00	4.73E+00	0.00E+00	0.00E+00	0.00E+00
KR-88	3.36E+04	1.05E+04	9.79E+04	0.00E+00	0.00E+00	0.00E+00	1.24E+01	2.23E+00	0.00E+00	0.00E+00	0.00E+00

						1.79E+02	6.83E+01	2.35E+01	0.00E+00	0.00E+00	0.00E+00

1 QDC CRDA, EAB, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO

SPRAYED VOL

AT .500 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =

00.00

CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	1.60E-07	1.94E-09	4.78E+02	0.00E+00	0.00E+00	5.29E+01	1.29E-02	6.28E-03	0.00E+00	0.00E+00	0.00E+00
I-132	1.98E-07	2.41E-09	6.84E+02	0.00E+00	0.00E+00	4.33E-01	1.19E-01	2.04E-02	0.00E+00	0.00E+00	0.00E+00
I-133	3.16E-07	3.85E-09	9.61E+02	0.00E+00	0.00E+00	1.74E+01	3.32E-02	2.71E-02	0.00E+00	0.00E+00	0.00E+00
I-134	2.49E-07	3.03E-09	1.09E+03	0.00E+00	0.00E+00	1.21E-01	1.54E-01	3.32E-02	0.00E+00	0.00E+00	0.00E+00
I-135	2.74E-07	3.33E-09	8.61E+02	0.00E+00	0.00E+00	2.68E+00	1.11E-01	1.77E-02	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	8.77E-09	1.07E-10	2.62E+01	0.00E+00	0.00E+00	2.91E+00	7.06E-04	3.45E-04	0.00E+00	0.00E+00	0.00E+00
I-132	1.09E-08	1.32E-10	3.76E+01	0.00E+00	0.00E+00	2.38E-02	6.54E-03	1.12E-03	0.00E+00	0.00E+00	0.00E+00
I-133	1.74E-08	2.11E-10	5.28E+01	0.00E+00	0.00E+00	9.56E-01	1.83E-03	1.49E-03	0.00E+00	0.00E+00	0.00E+00
I-134	1.37E-08	1.66E-10	6.00E+01	0.00E+00	0.00E+00	6.65E-03	8.44E-03	1.82E-03	0.00E+00	0.00E+00	0.00E+00
I-135	1.51E-08	1.83E-10	4.73E+01	0.00E+00	0.00E+00	1.47E-01	6.10E-03	9.71E-04	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	7.01E-09	8.53E-11	2.10E+01	0.00E+00	0.00E+00	2.32E+00	5.65E-04	2.76E-04	0.00E+00	0.00E+00	0.00E+00
I-132	8.70E-09	1.06E-10	3.01E+01	0.00E+00	0.00E+00	1.91E-02	5.23E-03	8.98E-04	0.00E+00	0.00E+00	0.00E+00
I-133	1.39E-08	1.69E-10	4.22E+01	0.00E+00	0.00E+00	7.65E-01	1.46E-03	1.19E-03	0.00E+00	0.00E+00	0.00E+00
I-134	1.09E-08	1.33E-10	4.80E+01	0.00E+00	0.00E+00	5.32E-03	6.75E-03	1.46E-03	0.00E+00	0.00E+00	0.00E+00
I-135	1.20E-08	1.46E-10	3.78E+01	0.00E+00	0.00E+00	1.18E-01	4.88E-03	7.77E-04	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	1.26E-07	1.53E-09	3.76E+02	0.00E+00	0.00E+00	0.00E+00	6.00E-04	3.38E-03	0.00E+00	0.00E+00	0.00E+00
XE-133M	8.45E-07	1.03E-08	2.54E+03	0.00E+00	0.00E+00	0.00E+00	6.08E-03	2.63E-02	0.00E+00	0.00E+00	0.00E+00
XE-133	3.52E-05	4.28E-07	1.06E+05	0.00E+00	0.00E+00	0.00E+00	2.30E-01	1.03E+00	0.00E+00	0.00E+00	0.00E+00
XE-135M	2.53E-06	3.07E-08	2.72E+04	0.00E+00	0.00E+00	0.00E+00	8.32E-01	1.76E-01	0.00E+00	0.00E+00	0.00E+00
XE-135	1.12E-05	1.36E-07	3.47E+04	0.00E+00	0.00E+00	0.00E+00	6.20E-01	7.46E-01	0.00E+00	0.00E+00	0.00E+00
XE-138	9.73E-06	1.18E-07	9.12E+04	0.00E+00	0.00E+00	0.00E+00	1.90E+01	4.86E+00	0.00E+00	0.00E+00	0.00E+00
KR-83M	1.57E-06	1.91E-08	5.61E+03	0.00E+00	0.00E+00	0.00E+00	2.03E-03	1.27E-02	0.00E+00	0.00E+00	0.00E+00
KR-85M	4.79E-06	5.83E-08	1.55E+04	0.00E+00	0.00E+00	0.00E+00	1.75E-01	2.40E-01	0.00E+00	0.00E+00	0.00E+00
KR-85	2.37E-07	2.88E-09	7.08E+02	0.00E+00	0.00E+00	0.00E+00	1.08E-04	1.05E-02	0.00E+00	0.00E+00	0.00E+00
KR-87	7.75E-06	9.42E-08	3.01E+04	0.00E+00	0.00E+00	0.00E+00	3.00E+00	2.11E+00	0.00E+00	0.00E+00	0.00E+00
KR-88	1.30E-05	1.59E-07	4.39E+04	0.00E+00	0.00E+00	0.00E+00	5.55E+00	9.99E-01	0.00E+00	0.00E+00	0.00E+00

						8.08E+01	2.99E+01	1.03E+01	0.00E+00	0.00E+00	0.00E+00

1 QDC CRDA, EAB, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 2.000 HOURS: X/Q(SITE)= .23E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=.0 CFM
X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: CLEANUP RATES (HR-1) (SPRAY, PRIMARY, SECONDARY, CONT CENTER) and FILTER NON-REMOVAL FACTORS (RELEASE, CONT CENTER). Includes sub-sections for ELEMENTAL, PARTICULATE, ORGANIC, ACTIVITY (CURIES), CONTROL ROOM DOSES (REM), and SITE BOUNDARY DOSES (REM) for various isotopes (I-131, I-132, I-133, I-134, I-135, XE-131M, XE-133M, etc.).

1

QDC CRDA, EAB, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 2 h

Table with columns: ISOTOPE and ACTIVITY RELEASED (CURIES) at 2. HRS. Includes sub-sections for ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES for various isotopes (I-131, I-132, I-133, I-134, I-135, XE-131M).

XE-133M	8.18E+03	8.18E+03
XE-133	3.40E+05	3.40E+05
XE-135M	9.06E+04	9.06E+04
XE-135	1.12E+05	1.12E+05
XE-138	3.02E+05	3.02E+05
KR-83M	1.82E+04	1.82E+04
KR-85M	4.98E+04	4.98E+04
KR-85	2.28E+03	2.28E+03
KR-87	9.76E+04	9.76E+04
KR-88	1.42E+05	1.42E+05

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 19:17:43.88

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 19:00:38.48

1 QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s
 2 2 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 2.592E6
 6 0.2402 0.
 7 9.058E-4 0.
 8 2*1.
 9 2*2460
 10 3.2E-5 0.
 11 7.00E-4 0.
 12 2*0.
 13 2*0.
 14 2*0.
 15 2*0.
 16 2*0.
 17 2*0.
 18 2*0.
 19 2*0.
 20 2*0.
 21 6*1.
 22 3*1.
 23 7.43E+3 1.04E+4 1.32E+4 1.48E+4 1.16E+4 1.57E+3 8.14E+3 3.33E+5
 24 8.89E+4 8.25E+4 3.17E+5 8.39E+3 3.21E+4 4.57E+3 6.03E+4 8.93E+4

1

QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s

INITIAL CONTAINMENT INVENTORY

ISOTOPE ACTIVITY (CURIES)

I-131 7.430E+03
 I-132 1.040E+04
 I-133 1.320E+04
 I-134 1.480E+04
 I-135 1.160E+04
 XE-131M 1.570E+03
 XE-133M 8.140E+03
 XE-133 3.330E+05
 XE-135M 8.890E+04
 XE-135 8.250E+04
 XE-138 3.170E+05
 KR-83M 8.390E+03
 KR-85M 3.210E+04
 KR-85 4.570E+03
 KR-87 6.030E+04
 KR-88 8.930E+04

1

QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO
 SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM
 INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .78E+02 VOL/DAY PCT PRI LKG TO ATM =
 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	4.00E+02	1.29E+03	4.31E+00	3.50E-03	6.70E-07	5.27E-02	1.28E-05	6.25E-06	5.67E-04	4.92E-09	6.73E-08
I-132	5.60E+02	1.80E+03	6.03E+00	4.90E-03	9.38E-07	4.22E-04	1.16E-04	1.99E-05	4.55E-06	3.85E-08	2.14E-07
I-133	7.11E+02	2.28E+03	7.66E+00	6.22E-03	1.19E-06	1.53E-02	2.92E-05	2.38E-05	1.65E-04	1.41E-08	2.57E-07
I-134	7.96E+02	2.56E+03	8.58E+00	6.97E-03	1.33E-06	1.05E-04	1.33E-04	2.87E-05	1.13E-06	5.89E-08	3.10E-07

I-135	6.24E+02	2.01E+03	6.73E+00	5.47E-03	1.05E-06	2.32E-03	9.58E-05	1.53E-05	2.50E-05	2.51E-08	1.64E-07
PARTICULATE											
I-131	2.20E+01	7.07E+01	2.37E-01	1.92E-04	3.68E-08	2.89E-03	7.03E-07	3.44E-07	3.12E-05	2.70E-10	3.70E-09
I-132	3.07E+01	9.89E+01	3.32E-01	2.69E-04	5.15E-08	2.32E-05	6.37E-06	1.09E-06	2.50E-07	2.12E-09	1.18E-08
I-133	3.90E+01	1.26E+02	4.21E-01	3.42E-04	6.54E-08	8.41E-04	1.61E-06	1.31E-06	9.06E-06	7.74E-10	1.41E-08
I-134	4.37E+01	1.41E+02	4.72E-01	3.83E-04	7.33E-08	5.76E-06	7.31E-06	1.58E-06	6.20E-08	3.23E-09	1.70E-08
I-135	3.43E+01	1.10E+02	3.70E-01	3.00E-04	5.75E-08	1.27E-04	5.26E-06	8.38E-07	1.37E-06	1.38E-09	9.03E-09
ORGANIC											
I-131	1.76E+01	5.65E+01	1.90E-01	1.54E-04	2.95E-08	2.32E-03	5.63E-07	2.75E-07	2.49E-05	2.16E-10	2.96E-09
I-132	2.46E+01	7.91E+01	2.65E-01	2.15E-04	4.12E-08	1.86E-05	5.09E-06	8.75E-07	2.00E-07	1.69E-09	9.42E-09
I-133	3.12E+01	1.00E+02	3.37E-01	2.74E-04	5.24E-08	6.73E-04	1.28E-06	1.05E-06	7.25E-06	6.19E-10	1.13E-08
I-134	3.50E+01	1.12E+02	3.77E-01	3.06E-04	5.86E-08	4.61E-06	5.85E-06	1.26E-06	4.96E-08	2.59E-09	1.36E-08
I-135	2.74E+01	8.82E+01	2.96E-01	2.40E-04	4.60E-08	1.02E-04	4.21E-06	6.71E-07	1.10E-06	1.10E-09	7.22E-09
NOBLE GASES											
XE-131M	3.72E+02	1.19E+03	4.01E+00	3.25E-03	6.23E-07	0.00E+00	7.05E-07	3.98E-06	0.00E+00	1.19E-09	4.29E-08
XE-133M	1.93E+03	6.19E+03	2.08E+01	1.69E-02	3.23E-06	0.00E+00	5.48E-06	2.37E-05	0.00E+00	2.72E-09	2.55E-07
XE-133	7.88E+04	2.53E+05	8.49E+02	6.90E-01	1.32E-04	0.00E+00	2.04E-04	9.13E-04	0.00E+00	2.49E-07	9.83E-06
XE-135M	2.09E+04	6.73E+04	2.26E+02	1.83E-01	3.51E-05	0.00E+00	7.63E-04	1.61E-04	0.00E+00	3.02E-07	1.74E-06
XE-135	1.95E+04	6.28E+04	2.10E+02	1.71E-01	3.27E-05	0.00E+00	4.14E-04	4.99E-04	0.00E+00	1.59E-07	5.37E-06
XE-138	7.47E+04	2.40E+05	8.07E+02	6.54E-01	1.25E-04	0.00E+00	1.85E-02	4.75E-03	0.00E+00	5.11E-05	5.11E-05
KR-83M	1.98E+03	6.38E+03	2.14E+01	1.74E-02	3.33E-06	0.00E+00	8.56E-07	5.35E-06	0.00E+00	5.04E-09	5.77E-08
KR-85M	7.59E+03	2.44E+04	8.19E+01	6.65E-02	1.27E-05	0.00E+00	1.02E-04	1.40E-04	0.00E+00	4.23E-08	1.51E-06
KR-85	1.08E+03	3.48E+03	1.17E+01	9.47E-03	1.81E-06	0.00E+00	1.96E-07	1.91E-05	0.00E+00	7.71E-11	2.06E-07
KR-87	1.43E+04	4.58E+04	1.54E+02	1.25E-01	2.39E-05	0.00E+00	1.69E-03	1.19E-03	0.00E+00	3.25E-07	1.28E-05
KR-88	2.11E+04	6.79E+04	2.28E+02	1.85E-01	3.54E-05	0.00E+00	3.18E-03	5.72E-04	0.00E+00	1.05E-06	6.16E-06
						7.78E-02	2.53E-02	8.38E-03	8.38E-04	4.18E-06	9.02E-05

1 QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO

SPRAYED VOL

AT 720.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM =

00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	3.02E+01	9.70E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E+00	9.94E-06	1.36E-04
I-132	3.37E-92	1.08E-91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.70E-03	5.68E-05	3.16E-04
I-133	3.38E-08	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-01	2.75E-05	5.01E-04
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.15E-03	5.98E-05	3.14E-04
I-135	3.08E-30	9.89E-30	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.49E-02	4.51E-05	2.95E-04
PARTICULATE											
I-131	1.66E+00	5.33E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-02	5.46E-07	7.48E-06
I-132	1.85E-93	5.95E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.68E-04	3.12E-06	1.74E-05
I-133	1.86E-09	5.97E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.77E-02	1.51E-06	2.75E-05
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E-05	3.28E-06	1.73E-05
I-135	1.69E-31	5.44E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-03	2.48E-06	1.62E-05
ORGANIC											
I-131	1.33E+00	4.27E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E-02	4.37E-07	5.98E-06
I-132	1.48E-93	4.76E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-04	2.50E-06	1.39E-05
I-133	1.49E-09	4.78E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-02	1.21E-06	2.20E-05
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.04E-05	2.63E-06	1.38E-05
I-135	1.35E-31	4.35E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.97E-03	1.98E-06	1.30E-05
NOBLE GASES											
XE-131M	6.39E+01	2.06E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-06	8.67E-05
XE-133M	1.94E-01	6.25E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.43E-06	5.10E-04
XE-133	1.53E+03	4.93E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04	1.98E-02
XE-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04	8.14E-04
XE-135	3.46E-20	1.11E-19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-04	9.96E-03
XE-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.65E-04	2.61E-02
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.99E-06	8.00E-05
KR-85M	3.76E-46	1.21E-45	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-05	2.56E-03
KR-85	1.08E+03	3.46E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-07	4.18E-04	1.39E-05
KR-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-04	1.54E-02
KR-88	7.54E-74	2.42E-73	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-03	9.54E-03
						0.00E+00	0.00E+00	0.00E+00	1.67E+00	4.22E-03	8.71E-02

TOTAL DOSES 0-30 DAYS ===== ===== ===== ===== ===== =====
 7.78E-02 2.53E-02 8.38E-03 1.67E+00 4.23E-03 8.71E-02

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QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s

ISOTOPE	0. HRS	720. HRS	ACTIVITY RELEASED (CURIES)
ELEMENTAL			
I-131	4.31E+00	0.00E+00	4.31E+00
I-132	6.03E+00	0.00E+00	6.03E+00
I-133	7.66E+00	0.00E+00	7.66E+00
I-134	8.58E+00	0.00E+00	8.58E+00
I-135	6.73E+00	0.00E+00	6.73E+00
PARTICULATE			
I-131	2.37E-01	0.00E+00	2.37E-01
I-132	3.32E-01	0.00E+00	3.32E-01
I-133	4.21E-01	0.00E+00	4.21E-01
I-134	4.72E-01	0.00E+00	4.72E-01
I-135	3.70E-01	0.00E+00	3.70E-01
ORGANIC			
I-131	1.90E-01	0.00E+00	1.90E-01
I-132	2.65E-01	0.00E+00	2.65E-01
I-133	3.37E-01	0.00E+00	3.37E-01
I-134	3.77E-01	0.00E+00	3.77E-01
I-135	2.96E-01	0.00E+00	2.96E-01
NOBLE GASES			
XE-131M	4.01E+00	0.00E+00	4.01E+00
XE-133M	2.08E+01	0.00E+00	2.08E+01
XE-133	8.49E+02	0.00E+00	8.49E+02
XE-135M	2.26E+02	0.00E+00	2.26E+02
XE-135	2.10E+02	0.00E+00	2.10E+02
XE-138	8.07E+02	0.00E+00	8.07E+02
KR-83M	2.14E+01	0.00E+00	2.14E+01
KR-85M	8.19E+01	0.00E+00	8.19E+01
KR-85	1.17E+01	0.00E+00	1.17E+01
KR-87	1.54E+02	0.00E+00	1.54E+02
KR-88	2.28E+02	0.00E+00	2.28E+02

END EXECUTION DATE: 11/18/1999
 END EXECUTION TIME: 19:00:38.53

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 19:00:54.52

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d
 2 6 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 1800 7200 2.88+4 8.64+4 2.592E6
 6 0.2402 4*1.201E-2 0.
 7 5*1. 0.
 8 6*1.
 9 6*2460
 10 2*3.2E-5 2*9.0E-6 3.0E-6 0.
 11 3*7.00E-4 6.45E-6 3.81E-6 0.
 12 6*0.
 13 6*0.
 14 6*0.
 15 6*0.
 16 6*0.
 17 6*0.
 18 6*0.
 19 6*0.
 20 6*0.
 21 6*1.
 22 3*1.
 23 7.43E+3 1.04E+4 1.32E+4 1.48E+4 1.16E+4 1.57E+3 8.14E+3 3.33E+5
 24 8.89E+4 8.25E+4 3.17E+5 8.39E+3 3.21E+4 4.57E+3 6.03E+4 8.93E+4

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QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d

INITIAL CONTAINMENT INVENTORY

ISOTOPE ACTIVITY (CURIES)

I-131 7.430E+03
 I-132 1.040E+04
 I-133 1.320E+04
 I-134 1.480E+04
 I-135 1.160E+04
 XE-131M 1.570E+03
 XE-133M 8.140E+03
 XE-133 3.330E+05
 XE-135M 8.890E+04
 XE-135 8.250E+04
 XE-138 3.170E+05
 KR-83M 8.390E+03
 KR-85M 3.210E+04
 KR-85 4.570E+03
 KR-87 6.030E+04
 KR-88 8.930E+04

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QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO
 SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM
 INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =
 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH BODY	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	4.00E+02	1.25E+02	1.17E+03	9.46E-01	1.81E-04	1.42E+01	3.46E-03	1.69E-03	2.14E-01	1.86E-06	2.54E-05
I-132	5.60E+02	1.75E+02	1.63E+03	1.32E+00	2.53E-04	1.14E-01	3.13E-02	5.38E-03	1.71E-03	1.45E-05	8.08E-05
I-133	7.11E+02	2.22E+02	2.07E+03	1.68E+00	3.22E-04	4.14E+00	7.90E-03	6.44E-03	6.22E-02	5.31E-06	9.69E-05
I-134	7.96E+02	2.49E+02	2.32E+03	1.88E+00	3.60E-04	2.83E-02	3.60E-02	7.77E-03	4.26E-04	2.22E-05	1.17E-04

I-135	6.24E+02	1.95E+02	1.82E+03	1.48E+00	2.83E-04	6.26E-01	2.59E-02	4.12E-03	9.41E-03	9.47E-06	6.20E-05
PARTICULATE											
I-131	2.20E+01	6.88E+00	6.40E+01	5.20E-02	9.95E-06	7.82E-01	1.90E-04	9.28E-05	1.18E-02	1.02E-07	1.40E-06
I-132	3.07E+01	9.62E+00	8.96E+01	7.27E-02	1.39E-05	6.27E-03	1.72E-03	2.95E-04	9.42E-05	7.99E-07	4.44E-06
I-133	3.90E+01	1.22E+01	1.14E+02	9.24E-02	1.77E-05	2.27E-01	4.34E-04	3.54E-04	3.42E-03	2.92E-07	5.32E-06
I-134	4.37E+01	1.37E+01	1.27E+02	1.03E-01	1.98E-05	1.56E-03	1.98E-03	4.27E-04	2.34E-05	1.22E-06	6.41E-06
I-135	3.43E+01	1.07E+01	9.99E+01	8.12E-02	1.55E-05	3.44E-02	1.42E-03	2.27E-04	5.17E-04	5.20E-07	3.41E-06
ORGANIC											
I-131	1.76E+01	5.50E+00	5.12E+01	4.16E-02	7.96E-06	6.26E-01	1.52E-04	7.43E-05	9.40E-03	8.16E-08	1.12E-06
I-132	2.46E+01	7.70E+00	7.17E+01	5.82E-02	1.11E-05	5.01E-03	1.38E-03	2.36E-04	7.54E-05	6.39E-07	3.55E-06
I-133	3.12E+01	9.77E+00	9.10E+01	7.39E-02	1.41E-05	1.82E-01	3.47E-04	2.83E-04	2.73E-03	2.34E-07	4.26E-06
I-134	3.50E+01	1.09E+01	1.02E+02	8.27E-02	1.58E-05	1.25E-03	1.58E-03	3.41E-04	1.87E-05	9.76E-07	5.13E-06
I-135	2.74E+01	8.59E+00	8.00E+01	6.49E-02	1.24E-05	2.75E-02	1.14E-03	1.81E-04	4.14E-04	4.16E-07	2.72E-06
NOBLE GASES											
XE-131M	3.72E+02	1.16E+02	1.08E+03	8.79E-01	1.68E-04	0.00E+00	1.90E-04	1.08E-03	0.00E+00	4.48E-07	1.62E-05
XE-133M	1.93E+03	6.03E+02	5.61E+03	4.56E+00	8.72E-04	0.00E+00	1.48E-03	6.40E-03	0.00E+00	1.02E-06	9.62E-05
XE-133	7.88E+04	2.47E+04	2.30E+05	1.86E+02	3.57E-02	0.00E+00	5.51E-02	2.47E-01	0.00E+00	9.38E-05	3.71E-03
XE-135M	2.09E+04	6.55E+03	6.11E+04	4.95E+01	9.48E-03	0.00E+00	2.06E-01	4.37E-02	0.00E+00	1.14E-04	6.56E-04
XE-135	1.95E+04	6.11E+03	5.69E+04	4.62E+01	8.84E-03	0.00E+00	1.12E-01	1.35E-01	0.00E+00	6.01E-05	2.03E-03
XE-138	7.47E+04	2.34E+04	2.18E+05	1.77E+02	3.38E-02	0.00E+00	5.01E+00	1.28E+00	0.00E+00	7.17E-04	1.93E-02
KR-83M	1.98E+03	6.21E+02	5.78E+03	4.69E+00	8.98E-04	0.00E+00	2.31E-04	1.45E-03	0.00E+00	1.90E-06	2.17E-05
KR-85M	7.59E+03	2.38E+03	2.21E+04	1.80E+01	3.44E-03	0.00E+00	2.76E-02	3.79E-02	0.00E+00	1.59E-05	5.70E-04
KR-85	1.08E+03	3.38E+02	3.15E+03	2.56E+00	4.90E-04	0.00E+00	5.29E-05	5.17E-03	0.00E+00	2.91E-08	7.77E-05
KR-87	1.43E+04	4.46E+03	4.15E+04	3.37E+01	6.46E-03	0.00E+00	4.57E-01	3.21E-01	0.00E+00	1.22E-04	4.83E-03
KR-88	2.11E+04	6.61E+03	6.15E+04	5.00E+01	9.57E-03	0.00E+00	8.58E-01	1.54E-01	0.00E+00	3.95E-04	2.32E-03
						2.10E+01	6.84E+00	2.26E+00	3.16E-01	1.58E-03	3.40E-02

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO

SPRAYED VOL

AT .500 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM
INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =

00.00

ISOTOPE	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS						
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER					
ELEMENTAL	.000	.000	.000	.000	1.000	1.000					
PARTICULATE	.000	.000	.000	.000	1.000	1.000					
ORGANIC	.000	.000	.000	.000	1.000	1.000					
ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	1.75E-07	2.13E-09	5.25E+02	9.24E-01	1.77E-04	6.41E+00	1.56E-03	7.61E-04	1.47E+02	1.27E-03	1.74E-02
I-132	2.12E-07	2.57E-09	7.31E+02	1.11E+00	2.13E-04	5.11E-02	1.40E-02	2.41E-03	1.10E+00	9.31E-03	5.18E-02
I-133	3.07E-07	3.73E-09	9.32E+02	1.62E+00	3.10E-04	1.86E+00	3.56E-03	2.90E-03	4.24E+01	3.62E-03	6.61E-02
I-134	2.35E-07	2.85E-09	1.03E+03	1.24E+00	2.37E-04	1.26E-02	1.60E-02	3.45E-03	2.44E-01	1.27E-02	6.69E-02
I-135	2.61E-07	3.17E-09	8.18E+02	1.37E+00	2.63E-04	2.82E-01	1.16E-02	1.85E-03	6.31E+00	6.35E-03	4.16E-02
PARTICULATE											
I-131	9.64E-09	1.17E-10	2.89E+01	5.08E-02	9.72E-06	3.52E-01	8.56E-05	4.18E-05	8.07E+00	7.00E-05	9.58E-04
I-132	1.16E-08	1.41E-10	4.02E+01	6.12E-02	1.17E-05	2.81E-03	7.71E-04	1.32E-04	6.04E-02	5.12E-04	2.84E-03
I-133	1.69E-08	2.05E-10	5.12E+01	8.89E-02	1.70E-05	1.02E-01	1.95E-04	1.59E-04	2.33E+00	1.99E-04	3.63E-03
I-134	1.29E-08	1.57E-10	5.66E+01	6.79E-02	1.30E-05	6.91E-04	8.78E-04	1.90E-04	1.34E-02	6.99E-04	3.67E-03
I-135	1.43E-08	1.74E-10	4.50E+01	7.54E-02	1.44E-05	1.55E-02	6.40E-04	1.02E-04	3.47E-01	3.49E-04	2.28E-03
ORGANIC											
I-131	7.71E-09	9.37E-11	2.31E+01	4.06E-02	7.78E-06	2.82E-01	6.85E-05	3.35E-05	6.46E+00	5.60E-05	7.67E-04
I-132	9.30E-09	1.13E-10	3.21E+01	4.90E-02	9.38E-06	2.25E-03	6.17E-04	1.06E-04	4.83E-02	4.09E-04	2.28E-03
I-133	1.35E-08	1.64E-10	4.10E+01	7.11E-02	1.36E-05	8.19E-02	1.56E-04	1.28E-04	1.86E+00	1.59E-04	2.90E-03
I-134	1.03E-08	1.25E-10	4.53E+01	5.44E-02	1.04E-05	5.53E-04	7.02E-04	1.52E-04	1.07E-02	5.59E-04	2.94E-03
I-135	1.15E-08	1.39E-10	3.60E+01	6.03E-02	1.15E-05	1.24E-02	5.12E-04	8.15E-05	2.78E-01	2.79E-04	1.83E-03
NOBLE GASES											
XE-131M	1.63E-07	1.98E-09	4.88E+02	8.59E-01	1.64E-04	0.00E+00	8.58E-05	4.85E-04	0.00E+00	3.08E-04	1.11E-02
XE-133M	8.41E-07	1.02E-08	2.53E+03	4.43E+00	8.48E-04	0.00E+00	6.67E-04	2.88E-03	0.00E+00	7.02E-04	6.59E-02
XE-133	3.45E-05	4.20E-07	1.03E+05	1.82E+02	3.48E-02	0.00E+00	2.48E-02	1.11E-01	0.00E+00	6.44E-02	2.55E+00
XE-135M	2.44E-06	2.96E-08	2.63E+04	1.29E+01	2.46E-03	0.00E+00	8.87E-02	1.87E-02	0.00E+00	4.47E-02	2.58E-01
XE-135	8.26E-06	1.00E-07	2.56E+04	4.35E+01	8.33E-03	0.00E+00	5.04E-02	6.07E-02	0.00E+00	4.05E-02	1.37E+00
XE-138	1.00E-05	1.22E-07	9.41E+04	5.29E+01	1.01E-02	0.00E+00	2.16E+00	5.54E-01	0.00E+00	2.95E-01	8.00E+00
KR-83M	7.25E-07	8.81E-09	2.59E+03	3.82E+00	7.31E-04	0.00E+00	1.04E-04	6.48E-04	0.00E+00	1.20E-03	1.37E-02
KR-85M	3.08E-06	3.75E-08	9.94E+03	1.62E+01	3.11E-03	0.00E+00	1.24E-02	1.70E-02	0.00E+00	1.06E-02	3.78E-01
KR-85	4.75E-07	5.77E-09	1.42E+03	2.50E+00	4.79E-04	0.00E+00	2.39E-05	2.33E-03	0.00E+00	2.00E-05	5.34E-02
KR-87	4.77E-06	5.80E-08	1.85E+04	2.51E+01	4.81E-03	0.00E+00	2.04E-01	1.43E-01	0.00E+00	7.42E-02	2.92E+00
KR-88	8.20E-06	9.97E-08	2.76E+04	4.32E+01	8.27E-03	0.00E+00	3.85E-01	6.93E-02	0.00E+00	2.56E-01	1.51E+00
						9.48E+00	2.98E+00	9.93E-01	2.16E+02	8.25E-01	1.74E+01

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 2.000 HOURS: X/Q(SITE)= .90E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Includes sub-sections for ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES with various isotope activity and dose data.

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 8.000 HOURS: X/Q(SITE)= .90E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .65E-05 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Includes sub-sections for ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES with various isotope activity and dose data.

ELEMENTAL												
I-131	0.00E+00	0.00E+00	1.21E-35	2.23E-03	4.27E-07	4.14E-38	1.01E-41	4.92E-42	8.99E+01	7.80E-04	1.07E-02	
I-132	0.00E+00	0.00E+00	9.24E-36	2.88E-04	5.52E-08	1.82E-40	4.99E-41	8.57E-42	2.92E-01	2.47E-03	1.38E-02	
I-133	0.00E+00	0.00E+00	2.02E-35	3.13E-03	5.99E-07	1.13E-38	2.17E-41	1.77E-41	2.38E+01	2.03E-03	3.71E-02	
I-134	0.00E+00	0.00E+00	4.80E-36	7.64E-06	1.46E-09	1.65E-41	2.10E-41	4.52E-42	1.85E-02	9.63E-04	5.06E-03	
I-135	0.00E+00	0.00E+00	1.54E-35	1.57E-03	3.00E-07	1.49E-39	6.16E-41	9.81E-42	2.89E+00	2.91E-03	1.90E-02	
PARTICULATE												
I-131	0.00E+00	0.00E+00	6.62E-37	1.23E-04	2.35E-08	2.28E-39	5.53E-43	2.70E-43	4.94E+00	4.28E-05	5.86E-04	
I-132	0.00E+00	0.00E+00	5.08E-37	1.58E-05	3.03E-09	9.99E-42	2.74E-42	4.71E-43	1.60E-02	1.36E-04	7.56E-04	
I-133	0.00E+00	0.00E+00	1.11E-36	1.72E-04	3.29E-08	6.23E-40	1.19E-42	9.71E-43	1.31E+00	1.12E-04	2.04E-03	
I-134	0.00E+00	0.00E+00	2.64E-37	4.20E-07	8.04E-11	9.06E-43	1.15E-42	2.49E-43	1.01E-03	5.29E-05	2.78E-04	
I-135	0.00E+00	0.00E+00	8.45E-37	8.61E-05	1.65E-08	8.18E-41	3.38E-42	5.39E-43	1.59E-01	1.60E-04	1.05E-03	
ORGANIC												
I-131	0.00E+00	0.00E+00	5.30E-37	9.80E-05	1.88E-08	1.82E-39	4.42E-43	2.16E-43	3.95E+00	3.43E-05	4.69E-04	
I-132	0.00E+00	0.00E+00	4.06E-37	1.27E-05	2.43E-09	7.99E-42	2.19E-42	3.77E-43	1.28E-02	1.09E-04	6.05E-04	
I-133	0.00E+00	0.00E+00	8.87E-37	1.38E-04	2.63E-08	4.99E-40	9.52E-43	7.77E-43	1.05E+00	8.94E-05	1.63E-03	
I-134	0.00E+00	0.00E+00	2.11E-37	3.36E-07	6.43E-11	7.25E-43	9.21E-43	1.99E-43	8.12E-04	4.23E-05	2.23E-04	
I-135	0.00E+00	0.00E+00	6.76E-37	6.89E-05	1.32E-08	6.55E-41	2.71E-42	4.31E-43	1.27E-01	1.28E-04	8.37E-04	
NOBLE GASES												
XE-131M	0.00E+00	0.00E+00	1.12E-35	2.09E-03	4.00E-07	0.00E+00	5.55E-43	3.14E-42	0.00E+00	1.89E-04	6.82E-03	
XE-133M	0.00E+00	0.00E+00	5.70E-35	9.98E-03	1.91E-06	0.00E+00	4.23E-42	1.83E-41	0.00E+00	4.18E-04	3.93E-02	
XE-133	0.00E+00	0.00E+00	2.37E-33	4.33E-01	8.28E-05	0.00E+00	1.60E-40	7.15E-40	0.00E+00	3.92E-02	1.55E+00	
XE-135M	0.00E+00	0.00E+00	2.92E-36	6.70E-11	1.28E-14	0.00E+00	2.77E-42	5.86E-43	0.00E+00	5.48E-05	3.16E-04	
XE-135	0.00E+00	0.00E+00	5.08E-34	6.10E-02	1.17E-05	0.00E+00	2.81E-40	3.39E-40	0.00E+00	2.01E-02	6.78E-01	
XE-138	0.00E+00	0.00E+00	1.86E-35	2.39E-09	4.58E-13	0.00E+00	1.20E-40	3.09E-41	0.00E+00	6.66E-04	1.80E-02	
KR-83M	0.00E+00	0.00E+00	2.85E-35	5.86E-04	1.12E-07	0.00E+00	3.20E-43	2.00E-42	0.00E+00	2.65E-04	3.03E-03	
KR-85M	0.00E+00	0.00E+00	1.68E-34	1.23E-02	2.36E-06	0.00E+00	5.88E-41	8.08E-41	0.00E+00	4.15E-03	1.48E-01	
KR-85	0.00E+00	0.00E+00	3.28E-35	6.20E-03	1.19E-06	0.00E+00	1.55E-43	1.52E-41	0.00E+00	1.24E-05	3.30E-02	
KR-87	0.00E+00	0.00E+00	1.43E-34	1.03E-03	1.97E-07	0.00E+00	4.43E-40	3.11E-40	0.00E+00	1.04E-02	4.11E-01	
KR-88	0.00E+00	0.00E+00	3.89E-34	1.67E-02	3.20E-06	0.00E+00	1.52E-39	2.74E-40	0.00E+00	7.86E-02	4.62E-01	
							5.98E-38	2.78E-39	1.84E-39	1.28E+02	1.64E-01	3.44E+00

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 24.000 HOURS: X/Q(SITE)= .30E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .38E-05 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

ISOTOPE	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS			ACTIVITY (CURIES)			CONTROL ROOM			SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER	ISOTOPE			ISOTOPE			ISOTOPE			ISOTOPE				
						THYROID	WH	BETA	THYROID	WH	BETA	THYROID	WH	BETA	THYROID	WH	BETA		
ELEMENTAL	.000	.000	.000	.000	1.000	1.000													
PARTICULATE	.000	.000	.000	.000	1.000	1.000													
ORGANIC	.000	.000	.000	.000	1.000	1.000													
I-131	0.00E+00	0.00E+00	0.00E+00	5.81E-09	1.11E-12	0.00E+00	0.00E+00	0.00E+00	7.30E-01	6.33E-06	8.66E-05								
I-132	0.00E+00	0.00E+00	0.00E+00	6.41E-12	1.23E-15	0.00E+00	0.00E+00	0.00E+00	3.94E-04	3.34E-06	1.86E-05								
I-133	0.00E+00	0.00E+00	0.00E+00	5.10E-09	9.76E-13	0.00E+00	0.00E+00	0.00E+00	1.62E-01	1.38E-05	2.52E-04								
I-134	0.00E+00	0.00E+00	0.00E+00	5.90E-17	1.13E-20	0.00E+00	0.00E+00	0.00E+00	1.26E-06	6.55E-08	3.45E-07								
I-135	0.00E+00	0.00E+00	0.00E+00	8.29E-10	1.59E-13	0.00E+00	0.00E+00	0.00E+00	1.29E-02	1.29E-05	8.47E-05								
I-131	0.00E+00	0.00E+00	0.00E+00	3.19E-10	6.11E-14	0.00E+00	0.00E+00	0.00E+00	4.01E-02	3.48E-07	4.76E-06								
I-132	0.00E+00	0.00E+00	0.00E+00	3.52E-13	6.75E-17	0.00E+00	0.00E+00	0.00E+00	2.17E-05	1.84E-07	1.02E-06								
I-133	0.00E+00	0.00E+00	0.00E+00	2.80E-10	5.36E-14	0.00E+00	0.00E+00	0.00E+00	8.89E-03	7.59E-07	1.38E-05								
I-134	0.00E+00	0.00E+00	0.00E+00	3.24E-18	6.21E-22	0.00E+00	0.00E+00	0.00E+00	6.91E-08	3.60E-09	1.89E-08								
I-135	0.00E+00	0.00E+00	0.00E+00	4.55E-11	8.71E-15	0.00E+00	0.00E+00	0.00E+00	7.07E-04	7.11E-07	4.65E-06								
I-131	0.00E+00	0.00E+00	0.00E+00	2.56E-10	4.89E-14	0.00E+00	0.00E+00	0.00E+00	3.21E-02	2.78E-07	3.81E-06								
I-132	0.00E+00	0.00E+00	0.00E+00	2.82E-13	5.40E-17	0.00E+00	0.00E+00	0.00E+00	1.73E-05	1.47E-07	8.17E-07								
I-133	0.00E+00	0.00E+00	0.00E+00	2.24E-10	4.29E-14	0.00E+00	0.00E+00	0.00E+00	7.11E-03	6.07E-07	1.11E-05								
I-134	0.00E+00	0.00E+00	0.00E+00	2.59E-18	4.96E-22	0.00E+00	0.00E+00	0.00E+00	5.53E-08	2.88E-09	1.52E-08								
I-135	0.00E+00	0.00E+00	0.00E+00	3.64E-11	6.97E-15	0.00E+00	0.00E+00	0.00E+00	5.65E-04	5.69E-07	3.72E-06								
XE-131M	0.00E+00	0.00E+00	0.00E+00	5.55E-09	1.06E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-06	5.57E-05								
XE-133M	0.00E+00	0.00E+00	0.00E+00	2.25E-08	4.30E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-06	3.02E-04								
XE-133	0.00E+00	0.00E+00	0.00E+00	1.09E-06	2.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E-04	1.24E-02								
XE-135M	0.00E+00	0.00E+00	0.00E+00	5.70E-35	1.09E-38	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-14	2.97E-13								
XE-135	0.00E+00	0.00E+00	0.00E+00	4.99E-08	9.56E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04	3.55E-03								
XE-138	0.00E+00	0.00E+00	0.00E+00	2.04E-31	3.90E-35	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-12	9.55E-11								
KR-83M	0.00E+00	0.00E+00	0.00E+00	4.29E-12	8.22E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-07	2.70E-06								
KR-85M	0.00E+00	0.00E+00	0.00E+00	2.73E-09	5.23E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-05	4.76E-04								
KR-85	0.00E+00	0.00E+00	0.00E+00	1.71E-08	3.28E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-07	2.74E-04								

I-133	1.32E+02	8.87E-37	0.00E+00	0.00E+00	1.32E+02
I-134	1.47E+02	2.11E-37	0.00E+00	0.00E+00	1.47E+02
I-135	1.16E+02	6.76E-37	0.00E+00	0.00E+00	1.16E+02
NOBLE GASES					
XE-131M	1.57E+03	1.12E-35	0.00E+00	0.00E+00	1.57E+03
XE-133M	8.14E+03	5.70E-35	0.00E+00	0.00E+00	8.14E+03
XE-133	3.33E+05	2.37E-33	0.00E+00	0.00E+00	3.33E+05
XE-135M	8.74E+04	2.92E-36	0.00E+00	0.00E+00	8.74E+04
XE-135	8.25E+04	5.08E-34	0.00E+00	0.00E+00	8.25E+04
XE-138	3.12E+05	1.86E-35	0.00E+00	0.00E+00	3.12E+05
KR-83M	8.37E+03	2.85E-35	0.00E+00	0.00E+00	8.37E+03
KR-85M	3.21E+04	1.68E-34	0.00E+00	0.00E+00	3.21E+04
KR-85	4.57E+03	3.28E-35	0.00E+00	0.00E+00	4.57E+03
KR-87	6.01E+04	1.43E-34	0.00E+00	0.00E+00	6.01E+04
KR-88	8.92E+04	3.89E-34	0.00E+00	0.00E+00	8.92E+04

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 19:00:54.74

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 19:01:07.37

1 QDC CRDA, EAB, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s
 2 2 1 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 7200
 6 0.2402 0.
 7 9.058E-4 0.
 8 2*1.
 9 2*0.
 10 2.9E-4 0.
 11 2*0.
 12 2*0.
 13 2*0.
 14 2*0.
 15 2*0.
 16 2*0.
 17 2*0.
 18 2*0.
 19 2*0.
 20 2*0.
 21 6*1.
 22 3*1.
 23 7.43E+3 1.04E+4 1.32E+4 1.48E+4 1.16E+4 1.57E+3 8.14E+3 3.33E+5
 24 8.89E+4 8.25E+4 3.17E+5 8.39E+3 3.21E+4 4.57E+3 6.03E+4 8.93E+4

1

QDC CRDA, EAB, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	7.430E+03
I-132	1.040E+04
I-133	1.320E+04
I-134	1.480E+04
I-135	1.160E+04
XE-131M	1.570E+03
XE-133M	8.140E+03
XE-133	3.330E+05
XE-135M	8.890E+04
XE-135	8.250E+04
XE-138	3.170E+05
KR-83M	8.390E+03
KR-85M	3.210E+04
KR-85	4.570E+03
KR-87	6.030E+04
KR-88	8.930E+04

1

QDC CRDA, EAB, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=.0 CFM
 X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .78E+02 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) {UCI/CM3}		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH BODY	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	4.00E+02	1.29E+03	4.31E+00	0.00E+00	0.00E+00	4.77E-01	1.16E-04	5.67E-05	0.00E+00	0.00E+00	0.00E+00
I-132	5.60E+02	1.80E+03	6.03E+00	0.00E+00	0.00E+00	3.83E-03	1.05E-03	1.80E-04	0.00E+00	0.00E+00	0.00E+00
I-133	7.11E+02	2.28E+03	7.66E+00	0.00E+00	0.00E+00	1.39E-01	2.65E-04	2.16E-04	0.00E+00	0.00E+00	0.00E+00
I-134	7.96E+02	2.56E+03	8.58E+00	0.00E+00	0.00E+00	9.50E-04	1.21E-03	2.60E-04	0.00E+00	0.00E+00	0.00E+00

TOTAL DOSES 0-30 DAYS	=====	=====	=====	=====	=====	=====
	7.05E-01	2.29E-01	7.59E-02	0.00E+00	0.00E+00	0.00E+00

1

QDC CRDA, EAB, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s

ISOTOPE	2. HRS	ACTIVITY RELEASED (CURIES)
ELEMENTAL		
I-131	4.31E+00	4.31E+00
I-132	6.03E+00	6.03E+00
I-133	7.66E+00	7.66E+00
I-134	8.58E+00	8.58E+00
I-135	6.73E+00	6.73E+00
PARTICULATE		
I-131	2.37E-01	2.37E-01
I-132	3.32E-01	3.32E-01
I-133	4.21E-01	4.21E-01
I-134	4.72E-01	4.72E-01
I-135	3.70E-01	3.70E-01
ORGANIC		
I-131	1.90E-01	1.90E-01
I-132	2.65E-01	2.65E-01
I-133	3.37E-01	3.37E-01
I-134	3.77E-01	3.77E-01
I-135	2.96E-01	2.96E-01
NOBLE GASES		
XE-131M	4.01E+00	4.01E+00
XE-133M	2.08E+01	2.08E+01
XE-133	8.49E+02	8.49E+02
XE-135M	2.26E+02	2.26E+02
XE-135	2.10E+02	2.10E+02
XE-138	8.07E+02	8.07E+02
KR-83M	2.14E+01	2.14E+01
KR-85M	8.19E+01	8.19E+01
KR-85	1.17E+01	1.17E+01
KR-87	1.54E+02	1.54E+02
KR-88	2.28E+02	2.28E+02

END EXECUTION DATE: 11/18/1999
 END EXECUTION TIME: 19:01:07.37

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 19:00:31.17

1 QDC CRDA, EAB, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 2 h
 2 3 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 1800 7200
 6 0.2402 2*1.201E-2
 7 3*1.
 8 3*1.
 9 3*0.
 10 2*2.9e-4 2.3E-5
 11 3*0.
 12 3*0.
 13 3*0.
 14 3*0.
 15 3*0.
 16 3*0.
 17 3*0.
 18 3*0.
 19 3*0.
 20 3*0.
 21 6*1.
 22 3*1.
 23 7.43E+3 1.04E+4 1.32E+4 1.48E+4 1.16E+4 1.57E+3 8.14E+3 3.33E+5
 24 8.89E+4 8.25E+4 3.17E+5 8.39E+3 3.21E+4 4.57E+3 6.03E+4 8.93E+4

1

QDC CRDA, EAB, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 2 h

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	7.430E+03
I-132	1.040E+04
I-133	1.320E+04
I-134	1.480E+04
I-135	1.160E+04
XE-131M	1.570E+03
XE-133M	8.140E+03
XE-133	3.330E+05
XE-135M	8.890E+04
XE-135	8.250E+04
XE-138	3.170E+05
KR-83M	8.390E+03
KR-85M	3.210E+04
KR-85	4.570E+03
KR-87	6.030E+04
KR-88	8.930E+04

1

QDC CRDA, EAB, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS
 1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO
 SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=
 .0 CFM
 X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO AIM =
 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH BODY	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	4.00E+02	1.25E+02	1.17E+03	0.00E+00	0.00E+00	1.29E+02	3.13E-02	1.53E-02	0.00E+00	0.00E+00	0.00E+00
I-132	5.60E+02	1.75E+02	1.63E+03	0.00E+00	0.00E+00	1.03E+00	2.84E-01	4.87E-02	0.00E+00	0.00E+00	0.00E+00
I-133	7.11E+02	2.22E+02	2.07E+03	0.00E+00	0.00E+00	3.75E+01	7.16E-02	5.84E-02	0.00E+00	0.00E+00	0.00E+00
I-134	7.96E+02	2.49E+02	2.32E+03	0.00E+00	0.00E+00	2.57E-01	3.26E-01	7.04E-02	0.00E+00	0.00E+00	0.00E+00

I-135	6.24E+02	1.95E+02	1.82E+03	0.00E+00	0.00E+00	5.67E+00	2.35E-01	3.74E-02	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	2.20E+01	6.88E+00	6.40E+01	0.00E+00	0.00E+00	7.09E+00	1.72E-03	8.41E-04	0.00E+00	0.00E+00	0.00E+00
I-132	3.07E+01	9.62E+00	8.96E+01	0.00E+00	0.00E+00	5.68E-02	1.56E-02	2.68E-03	0.00E+00	0.00E+00	0.00E+00
I-133	3.90E+01	1.22E+01	1.14E+02	0.00E+00	0.00E+00	2.06E+00	3.93E-03	3.21E-03	0.00E+00	0.00E+00	0.00E+00
I-134	4.37E+01	1.37E+01	1.27E+02	0.00E+00	0.00E+00	1.41E-02	1.79E-02	3.87E-03	0.00E+00	0.00E+00	0.00E+00
I-135	3.43E+01	1.07E+01	9.99E+01	0.00E+00	0.00E+00	3.12E-01	1.29E-02	2.05E-03	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	1.76E+01	5.50E+00	5.12E+01	0.00E+00	0.00E+00	5.67E+00	1.38E-03	6.73E-04	0.00E+00	0.00E+00	0.00E+00
I-132	2.46E+01	7.70E+00	7.17E+01	0.00E+00	0.00E+00	4.54E-02	1.25E-02	2.14E-03	0.00E+00	0.00E+00	0.00E+00
I-133	3.12E+01	9.77E+00	9.10E+01	0.00E+00	0.00E+00	1.65E+00	3.15E-03	2.57E-03	0.00E+00	0.00E+00	0.00E+00
I-134	3.50E+01	1.09E+01	1.02E+02	0.00E+00	0.00E+00	1.13E-02	1.43E-02	3.09E-03	0.00E+00	0.00E+00	0.00E+00
I-135	2.74E+01	8.59E+00	8.00E+01	0.00E+00	0.00E+00	2.49E-01	1.03E-02	1.64E-03	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	3.72E+02	1.16E+02	1.08E+03	0.00E+00	0.00E+00	0.00E+00	1.73E-03	9.75E-03	0.00E+00	0.00E+00	0.00E+00
XE-133M	1.93E+03	6.03E+02	5.61E+03	0.00E+00	0.00E+00	0.00E+00	1.34E-02	5.80E-02	0.00E+00	0.00E+00	0.00E+00
XE-133	7.88E+04	2.47E+04	2.30E+05	0.00E+00	0.00E+00	0.00E+00	4.99E-01	2.24E+00	0.00E+00	0.00E+00	0.00E+00
XE-135M	2.09E+04	6.55E+03	6.11E+04	0.00E+00	0.00E+00	0.00E+00	1.87E+00	3.96E-01	0.00E+00	0.00E+00	0.00E+00
XE-135	1.95E+04	6.11E+03	5.69E+04	0.00E+00	0.00E+00	0.00E+00	1.01E+00	1.22E+00	0.00E+00	0.00E+00	0.00E+00
XE-138	7.47E+04	2.34E+04	2.18E+05	0.00E+00	0.00E+00	0.00E+00	4.54E+01	1.16E+01	0.00E+00	0.00E+00	0.00E+00
KR-83M	1.98E+03	6.21E+02	5.78E+03	0.00E+00	0.00E+00	0.00E+00	2.10E-03	1.31E-02	0.00E+00	0.00E+00	0.00E+00
KR-85M	7.59E+03	2.38E+03	2.21E+04	0.00E+00	0.00E+00	0.00E+00	2.50E-01	3.44E-01	0.00E+00	0.00E+00	0.00E+00
KR-85	1.08E+03	3.38E+02	3.15E+03	0.00E+00	0.00E+00	0.00E+00	4.80E-04	4.69E-02	0.00E+00	0.00E+00	0.00E+00
KR-87	1.43E+04	4.46E+03	4.15E+04	0.00E+00	0.00E+00	0.00E+00	4.14E+00	2.91E+00	0.00E+00	0.00E+00	0.00E+00
KR-88	2.11E+04	6.61E+03	6.15E+04	0.00E+00	0.00E+00	0.00E+00	7.78E+00	1.40E+00	0.00E+00	0.00E+00	0.00E+00
							1.91E+02	6.20E+01	2.05E+01	0.00E+00	0.00E+00

1 QDC CRDA, EAB, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .500 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS		
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER	
ELEMENTAL	.000	.000	.000	.000	1.000	1.000	
PARTICULATE	.000	.000	.000	.000	1.000	1.000	
ORGANIC	.000	.000	.000	.000	1.000	1.000	

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE			THYROID	WH	BODY	THYROID	WH	BODY
ELEMENTAL											
I-131	1.75E-07	2.13E-09	5.25E+02	0.00E+00	0.00E+00	5.81E+01	1.41E-02	6.90E-03	0.00E+00	0.00E+00	0.00E+00
I-132	2.12E-07	2.57E-09	7.31E+02	0.00E+00	0.00E+00	4.63E-01	1.27E-01	2.18E-02	0.00E+00	0.00E+00	0.00E+00
I-133	3.07E-07	3.73E-09	9.32E+02	0.00E+00	0.00E+00	1.69E+01	3.22E-02	2.63E-02	0.00E+00	0.00E+00	0.00E+00
I-134	2.35E-07	2.85E-09	1.03E+03	0.00E+00	0.00E+00	1.14E-01	1.45E-01	3.13E-02	0.00E+00	0.00E+00	0.00E+00
I-135	2.61E-07	3.17E-09	8.18E+02	0.00E+00	0.00E+00	2.55E+00	1.06E-01	1.68E-02	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	9.64E-09	1.17E-10	2.89E+01	0.00E+00	0.00E+00	3.19E+00	7.76E-04	3.79E-04	0.00E+00	0.00E+00	0.00E+00
I-132	1.16E-08	1.41E-10	4.02E+01	0.00E+00	0.00E+00	2.55E-02	6.99E-03	1.20E-03	0.00E+00	0.00E+00	0.00E+00
I-133	1.69E-08	2.05E-10	5.12E+01	0.00E+00	0.00E+00	9.28E-01	1.77E-03	1.45E-03	0.00E+00	0.00E+00	0.00E+00
I-134	1.29E-08	1.57E-10	5.66E+01	0.00E+00	0.00E+00	6.26E-03	7.96E-03	1.72E-03	0.00E+00	0.00E+00	0.00E+00
I-135	1.43E-08	1.74E-10	4.50E+01	0.00E+00	0.00E+00	1.40E-01	5.80E-03	9.24E-04	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	7.71E-09	9.37E-11	2.31E+01	0.00E+00	0.00E+00	2.55E+00	6.21E-04	3.03E-04	0.00E+00	0.00E+00	0.00E+00
I-132	9.30E-09	1.13E-10	3.21E+01	0.00E+00	0.00E+00	2.04E-02	5.59E-03	9.60E-04	0.00E+00	0.00E+00	0.00E+00
I-133	1.35E-08	1.64E-10	4.10E+01	0.00E+00	0.00E+00	7.42E-01	1.42E-03	1.16E-03	0.00E+00	0.00E+00	0.00E+00
I-134	1.03E-08	1.25E-10	4.53E+01	0.00E+00	0.00E+00	5.01E-03	6.36E-03	1.37E-03	0.00E+00	0.00E+00	0.00E+00
I-135	1.15E-08	1.39E-10	3.60E+01	0.00E+00	0.00E+00	1.12E-01	4.64E-03	7.39E-04	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	1.63E-07	1.98E-09	4.88E+02	0.00E+00	0.00E+00	0.00E+00	7.78E-04	4.39E-03	0.00E+00	0.00E+00	0.00E+00
XE-133M	8.41E-07	1.02E-08	2.53E+03	0.00E+00	0.00E+00	0.00E+00	6.05E-03	2.61E-02	0.00E+00	0.00E+00	0.00E+00
XE-133	3.45E-05	4.20E-07	1.03E+05	0.00E+00	0.00E+00	0.00E+00	2.25E-01	1.01E+00	0.00E+00	0.00E+00	0.00E+00
XE-135M	2.44E-06	2.96E-08	2.63E+04	0.00E+00	0.00E+00	0.00E+00	8.03E-01	1.70E-01	0.00E+00	0.00E+00	0.00E+00
XE-135	8.26E-06	1.00E-07	2.56E+04	0.00E+00	0.00E+00	0.00E+00	4.56E-01	5.50E-01	0.00E+00	0.00E+00	0.00E+00
XE-138	1.00E-05	1.22E-07	9.41E+04	0.00E+00	0.00E+00	0.00E+00	1.96E+01	5.02E+00	0.00E+00	0.00E+00	0.00E+00
KR-83M	7.25E-07	8.81E-09	2.59E+03	0.00E+00	0.00E+00	0.00E+00	9.38E-04	5.87E-03	0.00E+00	0.00E+00	0.00E+00
KR-85M	3.08E-06	3.75E-08	9.94E+03	0.00E+00	0.00E+00	0.00E+00	1.12E-01	1.55E-01	0.00E+00	0.00E+00	0.00E+00
KR-85	4.75E-07	5.77E-09	1.42E+03	0.00E+00	0.00E+00	0.00E+00	2.16E-04	2.11E-02	0.00E+00	0.00E+00	0.00E+00
KR-87	4.77E-06	5.80E-08	1.85E+04	0.00E+00	0.00E+00	0.00E+00	1.85E+00	1.30E+00	0.00E+00	0.00E+00	0.00E+00
KR-88	8.20E-06	9.97E-08	2.76E+04	0.00E+00	0.00E+00	0.00E+00	3.49E+00	6.28E-01	0.00E+00	0.00E+00	0.00E+00
							8.59E+01	2.70E+01	9.00E+00	0.00E+00	0.00E+00

1 QDC CRDA, EAB, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO

SPRAYED VOL

AT 2.000 HOURS: X/Q(SITE)= .23E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =

00.00

ISOTOPE	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS						
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER					
ELEMENTAL	.000	.000	.000	.000	1.000	1.000					
PARTICULATE	.000	.000	.000	.000	1.000	1.000					
ORGANIC	.000	.000	.000	.000	1.000	1.000					
	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)		CONTROL ROOM DOSES (REM)			
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	1.19E-35	1.45E-37	1.78E-07	0.00E+00	0.00E+00	1.56E-09	3.79E-13	1.85E-13	0.00E+00	0.00E+00	0.00E+00
I-132	9.19E-36	1.12E-37	2.13E-07	0.00E+00	0.00E+00	1.07E-11	2.93E-12	5.04E-13	0.00E+00	0.00E+00	0.00E+00
I-133	2.00E-35	2.43E-37	3.11E-07	0.00E+00	0.00E+00	4.46E-10	8.52E-13	6.95E-13	0.00E+00	0.00E+00	0.00E+00
I-134	4.83E-36	5.87E-38	2.33E-07	0.00E+00	0.00E+00	2.05E-12	2.60E-12	5.61E-13	0.00E+00	0.00E+00	0.00E+00
I-135	1.52E-35	1.85E-37	2.63E-07	0.00E+00	0.00E+00	6.51E-11	2.69E-12	4.29E-13	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	6.54E-37	7.96E-39	9.75E-09	0.00E+00	0.00E+00	8.56E-11	2.08E-14	1.02E-14	0.00E+00	0.00E+00	0.00E+00
I-132	5.05E-37	6.14E-39	1.17E-08	0.00E+00	0.00E+00	5.87E-13	1.61E-13	2.77E-14	0.00E+00	0.00E+00	0.00E+00
I-133	1.10E-36	1.33E-38	1.71E-08	0.00E+00	0.00E+00	2.45E-11	4.68E-14	3.82E-14	0.00E+00	0.00E+00	0.00E+00
I-134	2.66E-37	3.23E-39	1.28E-08	0.00E+00	0.00E+00	1.13E-13	1.43E-13	3.08E-14	0.00E+00	0.00E+00	0.00E+00
I-135	8.37E-37	1.02E-38	1.45E-08	0.00E+00	0.00E+00	3.58E-12	1.48E-13	2.35E-14	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	5.24E-37	6.36E-39	7.80E-09	0.00E+00	0.00E+00	6.85E-11	1.66E-14	8.13E-15	0.00E+00	0.00E+00	0.00E+00
I-132	4.04E-37	4.91E-39	9.35E-09	0.00E+00	0.00E+00	4.70E-13	1.29E-13	2.22E-14	0.00E+00	0.00E+00	0.00E+00
I-133	8.77E-37	1.07E-38	1.37E-08	0.00E+00	0.00E+00	1.96E-11	3.74E-14	3.05E-14	0.00E+00	0.00E+00	0.00E+00
I-134	2.12E-37	2.58E-39	1.03E-08	0.00E+00	0.00E+00	9.00E-14	1.14E-13	2.47E-14	0.00E+00	0.00E+00	0.00E+00
I-135	6.70E-37	8.14E-39	1.16E-08	0.00E+00	0.00E+00	2.86E-12	1.18E-13	1.88E-14	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	1.11E-35	1.35E-37	1.65E-07	0.00E+00	0.00E+00	0.00E+00	2.09E-14	1.18E-13	0.00E+00	0.00E+00	0.00E+00
XE-133M	5.63E-35	6.85E-37	8.51E-07	0.00E+00	0.00E+00	0.00E+00	1.61E-13	6.98E-13	0.00E+00	0.00E+00	0.00E+00
XE-133	2.34E-33	2.84E-35	3.49E-05	0.00E+00	0.00E+00	0.00E+00	6.03E-12	2.70E-11	0.00E+00	0.00E+00	0.00E+00
XE-135M	3.06E-36	3.72E-38	2.33E-06	0.00E+00	0.00E+00	0.00E+00	5.64E-12	1.19E-12	0.00E+00	0.00E+00	0.00E+00
XE-135	5.03E-34	6.11E-36	8.34E-06	0.00E+00	0.00E+00	0.00E+00	1.18E-11	1.42E-11	0.00E+00	0.00E+00	0.00E+00
XE-138	1.94E-35	2.36E-37	9.64E-06	0.00E+00	0.00E+00	0.00E+00	1.59E-10	4.08E-11	0.00E+00	0.00E+00	0.00E+00
KR-83M	2.84E-35	3.45E-37	7.27E-07	0.00E+00	0.00E+00	0.00E+00	2.09E-14	1.31E-13	0.00E+00	0.00E+00	0.00E+00
KR-85M	1.66E-34	2.02E-36	3.11E-06	0.00E+00	0.00E+00	0.00E+00	2.79E-12	3.83E-12	0.00E+00	0.00E+00	0.00E+00
KR-85	3.24E-35	3.94E-37	4.81E-07	0.00E+00	0.00E+00	0.00E+00	5.81E-15	5.67E-13	0.00E+00	0.00E+00	0.00E+00
KR-87	1.43E-34	1.74E-36	4.77E-06	0.00E+00	0.00E+00	0.00E+00	3.77E-11	2.65E-11	0.00E+00	0.00E+00	0.00E+00
KR-88	3.86E-34	4.69E-36	8.25E-06	0.00E+00	0.00E+00	0.00E+00	8.27E-11	1.49E-11	0.00E+00	0.00E+00	0.00E+00
						2.29E-09	3.16E-10	1.32E-10	0.00E+00	0.00E+00	0.00E+00
						2.76E+02	8.90E+01	2.95E+01	0.00E+00	0.00E+00	0.00E+00

1

QDC CRDA, EAB, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 2 h

ISOTOPE	ACTIVITY RELEASED (CURIES)	
	2. HRS	
ELEMENTAL		
I-131	1.69E+03	1.69E+03
I-132	2.36E+03	2.36E+03
I-133	3.00E+03	3.00E+03
I-134	3.35E+03	3.35E+03
I-135	2.64E+03	2.64E+03
PARTICULATE		
I-131	9.29E+01	9.29E+01
I-132	1.30E+02	1.30E+02
I-133	1.65E+02	1.65E+02
I-134	1.84E+02	1.84E+02
I-135	1.45E+02	1.45E+02
ORGANIC		
I-131	7.43E+01	7.43E+01
I-132	1.04E+02	1.04E+02
I-133	1.32E+02	1.32E+02
I-134	1.47E+02	1.47E+02
I-135	1.16E+02	1.16E+02
NOBLE GASES		
XE-131M	1.57E+03	1.57E+03

XE-133M	8.14E+03	8.14E+03
XE-133	3.33E+05	3.33E+05
XE-135M	8.74E+04	8.74E+04
XE-135	8.25E+04	8.25E+04
XE-138	3.12E+05	3.12E+05
KR-83M	8.37E+03	8.37E+03
KR-85M	3.21E+04	3.21E+04
KR-85	4.57E+03	4.57E+03
KR-87	6.01E+04	6.01E+04
KR-88	8.92E+04	8.92E+04

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 19:00:31.28

AXIDENT VER 2 MOD 4
PRODUCTION DATE 02/18/92
BEGIN EXECUTION DATE: 10/22/1999
BEGIN EXECUTION TIME: 15:47:55.29

1 QDC TID-14844 SOURCE TERM
2 1 2 1.0 1.0
3 2561 2.60+6 1.845+5 5.83+4
4 0.0 0.0 0.0 1.0 1.0 2.78+5 0.0
5 1.
6 1.
7 1.
8 1.
9 1.
10 0.
11 0.
12 0.
13 0.
14 0.
15 0.
16 0.
17 0.
18 0.
19 0.
20 0.
21 6*1.
22 3*1.

QDC TID-14844 SOURCE TERM

INITIAL CONTAINMENT INVENTORY

ISOTOPE ACTIVITY (CURIES)

I-131	6.446E+07
I-132	9.592E+07
I-133	1.482E+08
I-134	1.728E+08
I-135	1.373E+08
XE-131M	4.874E+05
XE-133M	3.766E+06
XE-133	1.482E+08
XE-135M	3.987E+07
XE-135	1.396E+08
XE-138	1.307E+08
KR-83M	1.152E+07
KR-85M	2.880E+07
KR-85	9.665E+05
KR-87	5.538E+07
KR-88	7.886E+07

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 16:55:44.00

1 QDC CRDA, CR & LPZ, ALL REL MVP: TID-14844: 0 - 6 s
 2 2 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 2.592E6
 6 0.2402 0.
 7 9.058E-4 0.
 8 2*1.
 9 2*2460
 10 3.2E-5 0.
 11 7.00E-4 0.
 12 2*0.
 13 2*0.
 14 2*0.
 15 2*0.
 16 2*0.
 17 2*0.
 18 2*0.
 19 2*0.
 20 2*0.
 21 6*1.
 22 3*1.
 23 7.16E+3 1.06E+4 1.65E+4 1.92E+4 1.52E+4 1.36E+3 1.05E+4 4.13E+5
 24 1.11E+5 3.89E+5 3.65E+5 3.21E+4 8.04E+4 2.70E+3 1.55E+5 2.20E+5

1

QDC CRDA, CR & LPZ, ALL REL MVP: TID-14844: 0 - 6 s

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	7.160E+03
I-132	1.060E+04
I-133	1.650E+04
I-134	1.920E+04
I-135	1.520E+04
XE-131M	1.360E+03
XE-133M	1.050E+04
XE-133	4.130E+05
XE-135M	1.110E+05
XE-135	3.890E+05
XE-138	3.650E+05
KR-83M	3.210E+04
KR-85M	8.040E+04
KR-85	2.700E+03
KR-87	1.550E+05
KR-88	2.200E+05

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QDC CRDA, CR & LPZ, ALL REL MVP: TID-14844: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

00.00 X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .78E+02 VOL/DAY PCT PRI LKG TO ATM =

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) {UCI/CM3}		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH BODY	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	3.85E+02	1.24E+03	4.16E+00	3.38E-03	6.46E-07	6.83E-02	1.23E-05	6.02E-06	7.36E-04	4.74E-09	6.49E-08
I-132	5.70E+02	1.83E+03	6.15E+00	4.99E-03	9.56E-07	3.65E-03	1.18E-04	2.03E-05	3.93E-05	3.93E-08	2.18E-07
I-133	8.88E+02	2.86E+03	9.58E+00	7.78E-03	1.49E-06	4.25E-02	3.65E-05	2.98E-05	4.58E-04	1.76E-08	3.21E-07

I-134	1.03E+03	3.32E+03	1.11E+01	9.04E-03	1.73E-06	3.09E-03	1.73E-04	3.73E-05	3.33E-05	7.64E-08	4.02E-07	
I-135	8.18E+02	2.63E+03	8.82E+00	7.16E-03	1.37E-06	1.21E-02	1.26E-04	2.00E-05	1.31E-04	3.29E-08	2.15E-07	
PARTICULATE												
I-131	2.12E+01	6.81E+01	2.28E-01	1.85E-04	3.55E-08	3.75E-03	6.78E-07	3.31E-07	4.04E-05	2.61E-10	3.57E-09	
I-132	3.13E+01	1.01E+02	3.38E-01	2.74E-04	5.25E-08	2.01E-04	6.49E-06	1.11E-06	2.16E-06	2.16E-09	1.20E-08	
I-133	4.88E+01	1.57E+02	5.26E-01	4.27E-04	8.18E-08	2.34E-03	2.01E-06	1.64E-06	2.52E-05	9.68E-10	1.76E-08	
I-134	5.67E+01	1.82E+02	6.12E-01	4.97E-04	9.51E-08	1.70E-04	9.49E-06	2.05E-06	1.83E-06	4.20E-09	2.21E-08	
I-135	4.50E+01	1.45E+02	4.85E-01	3.94E-04	7.53E-08	6.67E-04	6.90E-06	1.10E-06	7.19E-06	1.81E-09	1.18E-08	
ORGANIC												
I-131	1.69E+01	5.45E+01	1.83E-01	1.48E-04	2.84E-08	3.00E-03	5.42E-07	2.65E-07	3.23E-05	2.08E-10	2.85E-09	
I-132	2.51E+01	8.06E+01	2.70E-01	2.20E-04	4.20E-08	1.61E-04	5.19E-06	8.91E-07	1.73E-06	1.73E-09	9.60E-09	
I-133	3.90E+01	1.26E+02	4.21E-01	3.42E-04	6.54E-08	1.87E-03	1.61E-06	1.31E-06	2.01E-05	7.74E-10	1.41E-08	
I-134	4.54E+01	1.46E+02	4.89E-01	3.97E-04	7.61E-08	1.36E-04	7.59E-06	1.64E-06	1.46E-06	3.36E-09	1.76E-08	
I-135	3.60E+01	1.16E+02	3.88E-01	3.15E-04	6.03E-08	5.34E-04	5.52E-06	8.79E-07	5.75E-06	1.45E-09	9.47E-09	
NOBLE GASES												
XE-131M	3.22E+02	1.03E+03	3.47E+00	2.82E-03	5.39E-07	0.00E+00	6.11E-07	3.45E-06	0.00E+00	1.03E-09	3.71E-08	
XE-133M	2.48E+03	7.99E+03	2.68E+01	2.18E-02	4.16E-06	0.00E+00	7.07E-06	3.06E-05	0.00E+00	3.50E-09	3.29E-07	
XE-133	9.77E+04	3.14E+05	1.05E+03	8.56E-01	1.64E-04	0.00E+00	2.53E-04	1.13E-03	0.00E+00	3.08E-07	1.22E-05	
XE-135M	2.62E+04	8.41E+04	2.82E+02	2.29E-01	4.38E-05	0.00E+00	9.53E-04	2.02E-04	0.00E+00	3.77E-07	2.17E-06	
XE-135	9.20E+04	2.96E+05	9.92E+02	8.06E-01	1.54E-04	0.00E+00	1.95E-03	2.35E-03	0.00E+00	7.51E-07	2.53E-05	
XE-138	8.60E+04	2.77E+05	9.29E+02	7.53E-01	1.44E-04	0.00E+00	2.13E-02	5.47E-03	0.00E+00	2.18E-06	5.89E-05	
KR-83M	7.59E+03	2.44E+04	8.19E+01	6.65E-02	1.27E-05	0.00E+00	3.27E-06	2.05E-05	0.00E+00	1.06E-07	3.79E-06	
KR-85M	1.90E+04	6.12E+04	2.05E+02	1.67E-01	3.19E-05	0.00E+00	2.56E-04	3.52E-04	0.00E+00	1.06E-07	3.79E-06	
KR-85	6.39E+02	2.05E+03	6.89E+00	5.59E-03	1.07E-06	0.00E+00	1.16E-07	1.13E-05	0.00E+00	4.55E-11	1.22E-07	
KR-87	3.66E+04	1.18E+05	3.95E+02	3.21E-01	6.14E-05	0.00E+00	4.35E-03	3.05E-03	0.00E+00	8.34E-07	3.29E-05	
KR-88	5.20E+04	1.67E+05	5.61E+02	4.56E-01	8.72E-05	0.00E+00	7.82E-03	1.41E-03	0.00E+00	2.58E-06	1.52E-05	
							1.43E-01	3.74E-02	1.42E-02	1.54E-03	7.34E-06	1.52E-04

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QDC CRDA, CR & LPZ, ALL REL MVP: TID-14844: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED

VOL

AT 720.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE=2460.0
CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM =

00.00

ISOTOPE	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS						
	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER						
						SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000					
PARTICULATE	.000	.000	.000	.000	1.000	1.000					
ORGANIC	.000	.000	.000	.000	1.000	1.000					
	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)		CONTROL ROOM DOSES (REM)			
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	2.91E+01	9.35E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E+00	9.58E-06	1.31E-04
I-132	3.44E-92	1.10E-91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.80E-02	5.79E-05	3.22E-04
I-133	4.23E-08	1.36E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.93E-01	3.43E-05	6.26E-04
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.38E-02	7.75E-05	4.08E-04
I-135	4.03E-30	1.30E-29	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-01	5.91E-05	3.87E-04
PARTICULATE											
I-131	1.60E+00	5.14E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.17E-02	5.26E-07	7.21E-06
I-132	1.89E-93	6.07E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.19E-03	3.18E-06	1.77E-05
I-133	2.32E-09	7.47E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-02	1.89E-06	3.44E-05
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.86E-03	4.26E-06	2.24E-05
I-135	2.22E-31	7.12E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-02	3.25E-06	2.13E-05
ORGANIC											
I-131	1.28E+00	4.11E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.53E-02	4.21E-07	5.76E-06
I-132	1.51E-93	4.86E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-03	2.55E-06	1.42E-05
I-133	1.86E-09	5.97E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-02	1.51E-06	2.75E-05
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-03	3.41E-06	1.79E-05
I-135	1.77E-31	5.70E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-02	2.60E-06	1.70E-05
NOBLE GASES											
XE-131M	5.54E+01	1.78E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-06	7.51E-05
XE-133M	2.51E-01	8.06E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-06	6.58E-04
XE-133	1.90E+03	6.11E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.22E-04	2.46E-02
XE-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-04	1.02E-03
XE-135	1.63E-19	5.24E-19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-03	4.70E-02
XE-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-03	3.01E-02
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.87E-05	3.06E-04
KR-85M	9.42E-46	3.03E-45	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.80E-04	6.42E-03
KR-85	6.36E+02	2.04E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.25E-08	2.47E-04
KR-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-03	3.96E-02
KR-88	1.86E-73	5.97E-73	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-03	2.35E-02

	0.00E+00	0.00E+00	0.00E+00	2.97E+00	8.78E-03	1.76E-01
TOTAL DOSES 0-30 DAYS	=====	=====	=====	=====	=====	=====
	1.43E-01	3.74E-02	1.42E-02	2.98E+00	8.79E-03	1.76E-01

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QDC CRDA, CR & LPZ, ALL REL MVP: TID-14844: 0 - 6 s

ACTIVITY RELEASED (CURIES)

ISOTOPE	0. HRS	720. HRS	
ELEMENTAL			
I-131	4.16E+00	0.00E+00	4.16E+00
I-132	6.15E+00	0.00E+00	6.15E+00
I-133	9.58E+00	0.00E+00	9.58E+00
I-134	1.11E+01	0.00E+00	1.11E+01
I-135	8.82E+00	0.00E+00	8.82E+00
PARTICULATE			
I-131	2.28E-01	0.00E+00	2.28E-01
I-132	3.38E-01	0.00E+00	3.38E-01
I-133	5.26E-01	0.00E+00	5.26E-01
I-134	6.12E-01	0.00E+00	6.12E-01
I-135	4.85E-01	0.00E+00	4.85E-01
ORGANIC			
I-131	1.83E-01	0.00E+00	1.83E-01
I-132	2.70E-01	0.00E+00	2.70E-01
I-133	4.21E-01	0.00E+00	4.21E-01
I-134	4.89E-01	0.00E+00	4.89E-01
I-135	3.88E-01	0.00E+00	3.88E-01
NOBLE GASES			
XE-131M	3.47E+00	0.00E+00	3.47E+00
XE-133M	2.68E+01	0.00E+00	2.68E+01
XE-133	1.05E+03	0.00E+00	1.05E+03
XE-135M	2.82E+02	0.00E+00	2.82E+02
XE-135	9.92E+02	0.00E+00	9.92E+02
XE-138	9.29E+02	0.00E+00	9.29E+02
KR-83M	8.19E+01	0.00E+00	8.19E+01
KR-85M	2.05E+02	0.00E+00	2.05E+02
KR-85	6.89E+00	0.00E+00	6.89E+00
KR-87	3.95E+02	0.00E+00	3.95E+02
KR-88	5.61E+02	0.00E+00	5.61E+02

END EXECUTION DATE: 11/18/1999
 END EXECUTION TIME: 16:55:44.44

Table with columns for I-133, I-134, I-135, PARTICULATE, ORGANIC, and NOBLE GASES. Each row contains 12 numerical values representing different parameters for each category.

1 QDC CRDA, CR & LPZ, ALL REL AOG: TID-14844: 6 s - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

VOL 1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED

AT .500 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .10E+01 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns for CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Sub-headers include SPRAY, PRIMARY, SECONDARY, CONT CENTER, RELEASE, and CONT CENTER. Rows include ELEMENTAL, PARTICULATE, and ORGANIC.

Table with columns for ISOTOPE, ACTIVITY (CURIES), CONTROL ROOM, SITE BOUNDARY DOSES (REM), and CONTROL ROOM DOSES (REM). Sub-headers include PRIMARY, SECONDARY, RELEASE, (CURIES), (UCI/CM3), THYROID, WH BODY, BETA, THYROID, WH BODY, BETA. Rows include ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES.

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ORGANIC											
I-131	0.00E+00	1.13E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	1.55E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	2.06E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	5.22E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	1.08E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	0.00E+00	6.22E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	8.50E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	1.13E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	2.87E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	5.94E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	0.00E+00	4.97E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	6.80E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	9.06E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	2.30E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	4.76E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	0.00E+00	9.54E+02	2.73E+02	7.39E-04	1.41E-07	0.00E+00	1.35E-05	7.62E-05	0.00E+00	3.29E-05	1.19E-03
XE-133M	0.00E+00	6.78E+03	2.00E+03	5.25E-03	1.00E-06	0.00E+00	1.49E-04	6.43E-04	0.00E+00	1.08E-04	1.02E-02
XE-133	0.00E+00	2.83E+05	8.16E+04	2.19E-01	4.19E-05	0.00E+00	5.51E-03	2.47E-02	0.00E+00	9.77E-03	3.86E-01
XE-135M	0.00E+00	4.40E-05	7.61E+00	3.41E-11	6.53E-15	0.00E+00	7.23E-06	1.53E-06	0.00E+00	1.33E-05	7.66E-05
XE-135	0.00E+00	1.51E+05	5.50E+04	1.17E-01	2.25E-05	0.00E+00	3.04E-02	3.67E-02	0.00E+00	1.89E-02	6.39E-01
XR-138	0.00E+00	1.45E-03	4.98E+01	1.12E-09	2.15E-13	0.00E+00	3.22E-04	8.25E-05	0.00E+00	1.49E-04	4.03E-03
KR-83M	0.00E+00	1.18E+03	1.30E+03	9.15E-04	1.75E-07	0.00E+00	1.46E-05	9.14E-05	0.00E+00	2.00E-04	2.29E-03
KR-85M	0.00E+00	1.63E+04	7.85E+03	1.26E-02	2.41E-06	0.00E+00	2.75E-03	3.79E-03	0.00E+00	2.07E-03	7.40E-02
KR-85	0.00E+00	1.93E+03	5.48E+02	1.50E-03	2.86E-07	0.00E+00	2.59E-06	2.53E-04	0.00E+00	1.47E-06	3.92E-03
KR-87	0.00E+00	1.39E+03	3.27E+03	1.08E-03	2.06E-07	0.00E+00	1.01E-02	7.11E-03	0.00E+00	5.26E-03	2.08E-01
KR-88	0.00E+00	2.17E+04	1.46E+04	1.68E-02	3.22E-06	0.00E+00	5.72E-02	1.03E-02	0.00E+00	3.84E-02	2.26E-01
						0.00E+00	1.07E-01	8.37E-02	0.00E+00	7.49E-02	1.55E+00

1 QDC CRDA, CR & LPZ, ALL REL AOG: TID-14844: 6 s - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED

VOL

AT 24.000 HOURS: X/Q(SITE)= .30E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .38E-05 SEC/M3 SEC RELEASE RATE= .10E+01 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	.000	1.000
PARTICULATE	.000	.000	.000	.000	.000	1.000
ORGANIC	.000	.000	.000	.000	.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	0.00E+00	5.49E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	6.40E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	6.24E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	7.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	1.06E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	0.00E+00	3.02E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	3.52E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	3.43E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	4.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	5.84E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	0.00E+00	2.41E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	2.82E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	2.74E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	3.30E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	4.68E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	0.00E+00	4.71E+02	4.56E+02	1.14E-04	2.19E-08	0.00E+00	7.52E-06	4.25E-05	0.00E+00	1.95E-06	7.04E-05

XE-133M	0.00E+00	2.84E+03	3.02E+03	6.89E-04	1.32E-07	0.00E+00	7.46E-05	3.23E-04	0.00E+00	5.76E-06	5.41E-04
XE-133	0.00E+00	1.33E+05	1.32E+05	3.23E-02	6.18E-06	0.00E+00	2.98E-03	1.33E-02	0.00E+00	5.61E-04	2.22E-02
XE-135M	0.00E+00	6.97E-24	6.78E-07	1.69E-30	3.24E-34	0.00E+00	2.15E-13	4.54E-14	0.00E+00	2.86E-14	1.65E-13
XE-135	0.00E+00	2.31E+04	4.55E+04	5.61E-03	1.07E-06	0.00E+00	8.39E-03	1.01E-02	0.00E+00	5.40E-04	1.82E-02
XE-138	0.00E+00	2.30E-20	2.50E-05	5.59E-27	1.07E-30	0.00E+00	5.38E-11	1.38E-11	0.00E+00	1.82E-12	4.93E-11
KR-83M	0.00E+00	1.61E+00	1.19E+02	3.91E-07	7.48E-11	0.00E+00	4.47E-07	2.80E-06	0.00E+00	5.80E-07	6.64E-06
KR-85M	0.00E+00	6.71E+02	3.26E+03	1.63E-04	3.12E-08	0.00E+00	3.82E-04	5.24E-04	0.00E+00	2.90E-05	1.04E-03
KR-85	0.00E+00	9.91E+02	9.39E+02	2.41E-04	4.61E-08	0.00E+00	1.48E-06	1.44E-04	0.00E+00	8.94E-08	2.39E-04
KR-87	0.00E+00	1.13E-01	9.84E+01	2.74E-08	5.24E-12	0.00E+00	1.01E-04	7.13E-05	0.00E+00	4.74E-06	1.87E-04
KR-88	0.00E+00	2.12E+02	3.09E+03	5.14E-05	9.84E-09	0.00E+00	4.04E-03	7.27E-04	0.00E+00	2.67E-04	1.57E-03
						0.00E+00	1.60E-02	2.53E-02	0.00E+00	1.41E-03	4.40E-02

1 QDC CRDA, CR & LPZ, ALL REL AOG: TID-14844: 6 s - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 720.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	.000	1.000
PARTICULATE	.000	.000	.000	.000	.000	1.000
ORGANIC	.000	.000	.000	.000	.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	0.00E+00	4.51E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	5.33E-92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	6.56E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	6.26E-30	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	0.00E+00	2.48E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	2.93E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	3.60E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	3.44E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	0.00E+00	1.98E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	2.34E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	2.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	2.75E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	0.00E+00	8.59E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.45E-08	3.05E-06
XE-133M	0.00E+00	3.89E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.22E-07	2.08E-05
XE-133	0.00E+00	2.95E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.35E-05	9.28E-04
XE-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-33	7.51E-33
XE-135	0.00E+00	2.53E-19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.68E-06	3.27E-04
XE-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.25E-30	2.23E-28
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-10	1.80E-09
KR-85M	0.00E+00	1.46E-45	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.76E-07	6.28E-06
KR-85	0.00E+00	9.86E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.98E-09	1.06E-05
KR-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.57E-11	3.38E-09
KR-88	0.00E+00	2.88E-73	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.51E-07	2.65E-06
						0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.41E-05	1.30E-03
TOTAL DOSES 0-30 DAYS						0.00E+00	4.13E-01	2.41E-01	0.00E+00	1.95E-01	3.95E+00

1 QDC CRDA, CR & LPZ, ALL REL AOG: TID-14844: 6 s - 30 d

ISOTOPE	ACTIVITY RELEASED (CURIES)				
	2. HRS	8. HRS	24. HRS	720. HRS	
ELEMENTAL					
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE					
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC					
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES					
XE-131M	1.11E+02	2.73E+02	4.56E+02	0.00E+00	8.40E+02
XE-133M	8.51E+02	2.00E+03	3.02E+03	0.00E+00	5.87E+03
XE-133	3.37E+04	8.16E+04	1.32E+05	0.00E+00	2.48E+05
XE-135M	1.95E+03	7.61E+00	6.78E-07	0.00E+00	1.96E+03
XE-135	2.97E+04	5.50E+04	4.55E+04	0.00E+00	1.30E+05
XE-138	7.05E+03	4.98E+01	2.50E-05	0.00E+00	7.10E+03
KR-83M	1.89E+03	1.30E+03	1.19E+02	0.00E+00	3.31E+03
KR-85M	5.69E+03	7.85E+03	3.26E+03	0.00E+00	1.68E+04
KR-85	2.21E+02	5.48E+02	9.39E+02	0.00E+00	1.71E+03
KR-87	7.92E+03	3.27E+03	9.84E+01	0.00E+00	1.13E+04
KR-88	1.44E+04	1.46E+04	3.09E+03	0.00E+00	3.21E+04

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 16:55:52.02

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 16:56:01.91

1 QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d
 2 6 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 1800 7200 2.88+4 8.64+4 2.592E6
 6 0.2402 4*1.201E-2 0.
 7 5*1. 0.
 8 6*1.
 9 6*2460
 10 2*3.2E-5 2*9.0E-6 3.0E-6 0.
 11 3*7.00E-4 6.45E-6 3.81E-6 0.
 12 6*0.
 13 6*0.
 14 6*0.
 15 6*0.
 16 6*0.
 17 6*0.
 18 6*0.
 19 6*0.
 20 6*0.
 21 6*1.
 22 3*1.
 23 7.16E+3 1.06E+4 1.65E+4 1.92E+4 1.52E+4 1.36E+3 1.05E+4 4.13E+5
 24 1.11E+5 3.89E+5 3.65E+5 3.21E+4 8.04E+4 2.70E+3 1.55E+5 2.20E+5

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QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	7.160E+03
I-132	1.060E+04
I-133	1.650E+04
I-134	1.920E+04
I-135	1.520E+04
XE-131M	1.360E+03
XE-133M	1.050E+04
XE-133	4.130E+05
XE-135M	1.110E+05
XE-135	3.890E+05
XE-138	3.650E+05
KR-83M	3.210E+04
KR-85M	8.040E+04
KR-85	2.700E+03
KR-87	1.550E+05
KR-88	2.200E+05

1

QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM
 X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	3.85E+02	1.21E+02	1.12E+03	9.12E-01	1.75E-04	1.85E+01	3.33E-03	1.63E-03	2.77E-01	1.79E-06	2.45E-05
I-132	5.70E+02	1.78E+02	1.66E+03	1.35E+00	2.58E-04	9.87E-01	3.19E-02	5.48E-03	1.48E-02	1.48E-05	8.24E-05

KR-88 2.02E-05 2.46E-07 6.80E+04 1.06E+02 2.04E-02 0.00E+00 9.48E-01 1.71E-01 0.00E+00 6.31E-01 3.71E+00

 1.73E+01 4.43E+00 1.69E+00 3.94E+02 1.57E+00 3.18E+01

1 QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED

VOL

AT 2.000 HOURS: X/Q(SITE)= .90E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0
 CFM
 X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =
 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)			
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA	
ELEMENTAL												
I-131	1.15E-35	1.40E-37	1.71E-07	2.67E-01	5.11E-05	7.91E-10	1.43E-13	6.98E-14	2.75E+02	1.77E-03	2.42E-02	
I-132	9.37E-36	1.14E-37	2.17E-07	2.18E-01	4.17E-05	3.62E-11	1.17E-12	2.01E-13	1.07E+01	1.06E-02	5.92E-02	
I-133	2.49E-35	3.03E-37	3.88E-07	5.80E-01	1.11E-04	4.85E-10	4.17E-13	3.40E-13	1.66E+02	6.37E-03	1.16E-01	
I-134	6.27E-36	7.62E-38	3.03E-07	1.46E-01	2.79E-05	2.36E-11	1.32E-12	2.85E-13	5.45E+00	1.25E-02	6.58E-02	
I-135	2.00E-35	2.43E-37	3.45E-07	4.64E-01	8.88E-05	1.33E-10	1.38E-12	2.20E-13	4.38E+01	1.10E-02	7.21E-02	
PARTICULATE												
I-131	6.31E-37	7.67E-39	9.40E-09	1.47E-02	2.81E-06	4.34E-11	7.85E-15	3.83E-15	1.51E+01	9.73E-05	1.33E-03	
I-132	5.15E-37	6.26E-39	1.19E-08	1.20E-02	2.29E-06	1.99E-12	6.43E-14	1.10E-14	5.86E-01	5.85E-04	3.25E-03	
I-133	1.37E-36	1.67E-38	2.13E-08	3.19E-02	6.10E-06	2.66E-11	2.29E-14	1.87E-14	9.10E+00	3.50E-04	6.38E-03	
I-134	3.44E-37	4.19E-39	1.66E-08	8.01E-03	1.53E-06	1.30E-12	7.25E-14	1.57E-14	3.00E-01	6.87E-04	3.61E-03	
I-135	1.10E-36	1.33E-38	1.89E-08	2.55E-02	4.88E-06	7.33E-12	7.58E-14	1.21E-14	2.41E+00	6.05E-04	3.96E-03	
ORGANIC												
I-131	5.05E-37	6.13E-39	7.52E-09	1.17E-02	2.24E-06	3.48E-11	6.28E-15	3.07E-15	1.21E+01	7.78E-05	1.07E-03	
I-132	4.12E-37	5.01E-39	9.53E-09	9.57E-03	1.83E-06	1.59E-12	5.14E-14	8.83E-15	4.69E-01	4.68E-04	2.60E-03	
I-133	1.10E-36	1.33E-38	1.71E-08	2.55E-02	4.88E-06	2.13E-11	1.83E-14	1.49E-14	7.28E+00	2.80E-04	5.10E-03	
I-134	2.76E-37	3.35E-39	1.33E-08	6.41E-03	1.23E-06	1.04E-12	5.80E-14	1.25E-14	2.40E-01	5.50E-04	2.89E-03	
I-135	8.77E-37	1.07E-38	1.52E-08	2.04E-02	3.90E-06	5.87E-12	6.06E-14	9.66E-15	1.93E+00	4.84E-04	3.17E-03	
NOBLE GASES												
XE-131M	9.60E-36	1.17E-37	1.43E-07	2.23E-01	4.27E-05	0.00E+00	7.07E-15	3.99E-14	0.00E+00	3.85E-04	1.39E-02	
XE-133M	7.26E-35	8.83E-37	1.10E-06	1.69E+00	3.23E-04	0.00E+00	8.15E-14	3.52E-13	0.00E+00	1.30E-03	1.22E-01	
XE-133	2.90E-33	3.52E-35	4.33E-05	6.74E+01	1.29E-02	0.00E+00	2.92E-12	1.31E-11	0.00E+00	1.15E-01	4.54E+00	
XE-135M	3.82E-36	4.65E-38	2.90E-06	8.89E-02	1.70E-05	0.00E+00	2.76E-12	5.83E-13	0.00E+00	1.23E-02	7.08E-02	
XE-135	2.37E-33	2.88E-35	3.93E-05	5.51E+01	1.06E-02	0.00E+00	2.18E-11	2.62E-11	0.00E+00	2.59E-01	8.74E+00	
XE-138	2.24E-35	2.72E-37	1.11E-05	5.20E-01	9.95E-05	0.00E+00	7.17E-11	1.84E-11	0.00E+00	8.91E-02	2.41E+00	
KR-83M	1.09E-34	1.32E-36	2.78E-06	2.52E+00	4.83E-04	0.00E+00	3.13E-14	1.96E-13	0.00E+00	4.86E-03	5.56E-02	
KR-85M	4.16E-34	5.06E-36	7.79E-06	9.68E+00	1.85E-03	0.00E+00	2.73E-12	3.76E-12	0.00E+00	3.34E-02	1.20E+00	
KR-85	1.92E-35	2.33E-37	2.84E-07	4.45E-01	8.53E-05	0.00E+00	1.34E-15	1.31E-13	0.00E+00	1.71E-05	4.57E-02	
KR-87	3.68E-34	4.48E-36	1.22E-05	8.56E+00	1.64E-03	0.00E+00	3.79E-11	2.66E-11	0.00E+00	1.75E-01	6.92E+00	
KR-88	9.51E-34	1.16E-35	2.03E-05	2.21E+01	4.23E-03	0.00E+00	7.97E-11	1.44E-11	0.00E+00	7.40E-01	4.35E+00	
							1.61E-09	2.24E-10	1.05E-10	5.50E+02	1.48E+00	2.88E+01

1 QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED

VOL

AT 8.000 HOURS: X/Q(SITE)= .90E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0
 CFM
 X/Q CONT ROOM= .65E-05 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =
 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)		CONTROL ROOM DOSES (REM)			
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	THYROID	WH BODY	BETA	
ORGANIC											
I-131	0.00E+00	0.00E+00	1.16E-35	2.15E-03	4.11E-07	5.37E-38	9.70E-42	4.74E-42	1.17E+02	7.51E-04	1.03E-02
I-132	0.00E+00	0.00E+00	9.42E-36	2.94E-04	5.63E-08	1.57E-39	5.08E-41	8.73E-42	2.53E+00	2.52E-03	1.40E-02
I-133	0.00E+00	0.00E+00	2.52E-35	3.91E-03	7.49E-07	3.15E-38	2.71E-41	2.21E-41	6.61E+01	2.54E-03	4.63E-02
I-134	0.00E+00	0.00E+00	6.23E-36	9.92E-06	1.90E-09	4.86E-40	2.72E-41	5.87E-42	5.45E-01	1.25E-03	6.57E-03
I-135	0.00E+00	0.00E+00	2.02E-35	2.05E-03	3.93E-07	7.80E-39	8.07E-41	1.28E-41	1.52E+01	3.81E-03	2.50E-02
PARTICULATE											
I-131	0.00E+00	0.00E+00	6.38E-37	1.18E-04	2.26E-08	2.95E-39	5.33E-43	2.60E-43	6.40E+00	4.13E-05	5.65E-04
I-132	0.00E+00	0.00E+00	5.17E-37	1.61E-05	3.09E-09	8.64E-41	2.79E-42	4.80E-43	1.39E-01	1.39E-04	7.70E-04
I-133	0.00E+00	0.00E+00	1.39E-36	2.15E-04	4.12E-08	1.73E-39	1.49E-42	1.21E-42	3.63E+00	1.40E-04	2.55E-03
I-134	0.00E+00	0.00E+00	3.42E-37	5.45E-07	1.04E-10	2.67E-41	1.49E-42	3.22E-43	2.99E-02	6.87E-05	3.61E-04
I-135	0.00E+00	0.00E+00	1.11E-36	1.13E-04	2.16E-08	4.29E-40	4.43E-42	7.06E-43	8.33E-01	2.09E-04	1.37E-03
ORGANIC											
I-131	0.00E+00	0.00E+00	5.11E-37	9.45E-05	1.81E-08	2.36E-39	4.26E-43	2.08E-43	5.12E+00	3.30E-05	4.52E-04
I-132	0.00E+00	0.00E+00	4.14E-37	1.29E-05	2.47E-09	6.92E-41	2.24E-42	3.84E-43	1.11E-01	1.11E-04	6.16E-04
I-133	0.00E+00	0.00E+00	1.11E-36	1.72E-04	3.29E-08	1.38E-39	1.19E-42	9.71E-43	2.91E+00	1.12E-04	2.04E-03
I-134	0.00E+00	0.00E+00	2.74E-37	4.36E-07	8.34E-11	2.14E-41	1.19E-42	2.58E-43	2.39E-02	5.49E-05	2.89E-04
I-135	0.00E+00	0.00E+00	8.86E-37	9.03E-05	1.73E-08	3.43E-40	3.55E-42	5.65E-43	6.66E-01	1.68E-04	1.10E-03
NOBLE GASES											
XE-131M	0.00E+00	0.00E+00	9.72E-36	1.81E-03	3.47E-07	0.00E+00	4.81E-43	2.72E-42	0.00E+00	1.64E-04	5.90E-03
XE-133M	0.00E+00	0.00E+00	7.35E-35	1.29E-02	2.46E-06	0.00E+00	5.46E-42	2.36E-41	0.00E+00	5.39E-04	5.06E-02
XE-133	0.00E+00	0.00E+00	2.93E-33	5.37E-01	1.03E-04	0.00E+00	1.98E-40	8.87E-40	0.00E+00	4.86E-02	1.92E+00
XE-135M	0.00E+00	0.00E+00	3.65E-36	8.36E-11	1.60E-14	0.00E+00	3.46E-42	7.32E-43	0.00E+00	6.84E-05	3.94E-04
XE-135	0.00E+00	0.00E+00	2.40E-33	2.88E-01	5.51E-05	0.00E+00	1.33E-39	1.60E-39	0.00E+00	9.47E-02	3.19E+00
XE-138	0.00E+00	0.00E+00	2.15E-35	2.75E-09	5.27E-13	0.00E+00	1.39E-40	3.55E-41	0.00E+00	7.67E-04	2.08E-02
KR-83M	0.00E+00	0.00E+00	1.09E-34	2.24E-03	4.29E-07	0.00E+00	1.23E-42	7.66E-42	0.00E+00	1.01E-03	1.16E-02
KR-85M	0.00E+00	0.00E+00	4.20E-34	3.09E-02	5.92E-06	0.00E+00	1.47E-40	2.02E-40	0.00E+00	1.04E-02	3.72E-01
KR-85	0.00E+00	0.00E+00	1.94E-35	3.67E-03	7.02E-07	0.00E+00	9.16E-44	8.95E-42	0.00E+00	7.30E-06	1.95E-02
KR-87	0.00E+00	0.00E+00	3.68E-34	2.64E-03	5.06E-07	0.00E+00	1.14E-39	8.00E-40	0.00E+00	2.68E-02	1.06E+00
KR-88	0.00E+00	0.00E+00	9.57E-34	4.12E-02	7.88E-06	0.00E+00	3.76E-39	6.76E-40	0.00E+00	1.94E-01	1.14E+00
						1.04E-37	6.93E-39	4.30E-39	2.21E+02	3.89E-01	7.90E+00

1 QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED

VOL

AT 24.000 HOURS: X/Q(SITE)= .30E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .38E-05 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)		CONTROL ROOM DOSES (REM)			
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	THYROID	WH BODY	BETA	
ELEMENTAL											
I-131	0.00E+00	0.00E+00	0.00E+00	5.60E-09	1.07E-12	0.00E+00	0.00E+00	0.00E+00	9.46E-01	6.10E-06	8.35E-05
I-132	0.00E+00	0.00E+00	0.00E+00	6.54E-12	1.25E-15	0.00E+00	0.00E+00	0.00E+00	3.41E-03	3.41E-06	1.89E-05
I-133	0.00E+00	0.00E+00	0.00E+00	6.37E-09	1.22E-12	0.00E+00	0.00E+00	0.00E+00	4.49E-01	1.73E-05	3.15E-04
I-134	0.00E+00	0.00E+00	0.00E+00	7.66E-17	1.47E-20	0.00E+00	0.00E+00	0.00E+00	3.71E-05	8.50E-08	4.47E-07
I-135	0.00E+00	0.00E+00	0.00E+00	1.09E-09	2.08E-13	0.00E+00	0.00E+00	0.00E+00	6.74E-02	1.70E-05	1.11E-04
PARTICULATE											
I-131	0.00E+00	0.00E+00	0.00E+00	3.08E-10	5.89E-14	0.00E+00	0.00E+00	0.00E+00	5.20E-02	3.35E-07	4.59E-06
I-132	0.00E+00	0.00E+00	0.00E+00	3.59E-13	6.88E-17	0.00E+00	0.00E+00	0.00E+00	1.88E-04	1.87E-07	1.04E-06
I-133	0.00E+00	0.00E+00	0.00E+00	3.50E-10	6.70E-14	0.00E+00	0.00E+00	0.00E+00	2.47E-02	9.49E-07	1.73E-05
I-134	0.00E+00	0.00E+00	0.00E+00	4.21E-18	8.05E-22	0.00E+00	0.00E+00	0.00E+00	2.04E-06	4.67E-09	2.46E-08
I-135	0.00E+00	0.00E+00	0.00E+00	5.97E-11	1.14E-14	0.00E+00	0.00E+00	0.00E+00	3.70E-03	9.32E-07	6.10E-06
ORGANIC											
I-131	0.00E+00	0.00E+00	0.00E+00	2.46E-10	4.71E-14	0.00E+00	0.00E+00	0.00E+00	4.16E-02	2.68E-07	3.67E-06
I-132	0.00E+00	0.00E+00	0.00E+00	2.87E-13	5.50E-17	0.00E+00	0.00E+00	0.00E+00	1.50E-04	1.50E-07	8.33E-07
I-133	0.00E+00	0.00E+00	0.00E+00	2.80E-10	5.36E-14	0.00E+00	0.00E+00	0.00E+00	1.97E-02	7.59E-07	1.38E-05
I-134	0.00E+00	0.00E+00	0.00E+00	3.37E-18	6.44E-22	0.00E+00	0.00E+00	0.00E+00	1.63E-06	3.74E-09	1.97E-08
I-135	0.00E+00	0.00E+00	0.00E+00	4.77E-11	9.13E-15	0.00E+00	0.00E+00	0.00E+00	2.96E-03	7.45E-07	4.88E-06
NOBLE GASES											
XE-131M	0.00E+00	0.00E+00	0.00E+00	4.81E-09	9.20E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E-06	4.83E-05

XE-133M	0.00E+00	0.00E+00	0.00E+00	2.90E-08	5.54E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.14E-06	3.89E-04
XE-133	0.00E+00	0.00E+00	0.00E+00	1.36E-06	2.60E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.90E-04	1.54E-02
XE-135M	0.00E+00	0.00E+00	0.00E+00	7.11E-35	1.36E-38	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.44E-14	3.71E-13
XE-135	0.00E+00	0.00E+00	0.00E+00	2.36E-07	4.51E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-04	1.68E-02
XE-138	0.00E+00	0.00E+00	0.00E+00	2.35E-31	4.50E-35	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.06E-12	1.10E-10
KR-83M	0.00E+00	0.00E+00	0.00E+00	1.64E-11	3.14E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E-05	1.19E-03
KR-85M	0.00E+00	0.00E+00	0.00E+00	6.85E-09	1.31E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.06E-08	1.62E-04
KR-85	0.00E+00	0.00E+00	0.00E+00	1.01E-08	1.94E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.28E-06	3.26E-04
KR-87	0.00E+00	0.00E+00	0.00E+00	1.15E-12	2.20E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.61E-04	2.12E-03
KR-88	0.00E+00	0.00E+00	0.00E+00	2.16E-09	4.14E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E+00	1.34E-03
						0.00E+00	0.00E+00	0.00E+00	1.61E+00	1.34E-03	3.70E-02

1 QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED

VOL

AT 720.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE=2460.0

CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM =

00.00

ISOTOPE	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS						
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER					
ELEMENTAL	.000	.000	.000	.000	1.000	1.000					
PARTICULATE	.000	.000	.000	.000	1.000	1.000					
ORGANIC	.000	.000	.000	.000	1.000	1.000					
ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH BODY	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-06	1.59E-11	2.18E-10
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.59E-11	7.58E-14	4.21E-13
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.31E-07	2.81E-11	5.13E-10
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-16	6.56E-19	3.45E-18
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E-08	8.96E-12	5.87E-11
PARTICULATE											
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.36E-07	8.74E-13	1.20E-11
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.17E-12	4.17E-15	2.32E-14
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.02E-08	1.55E-12	2.82E-11
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-17	3.61E-20	1.90E-19
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.96E-09	4.92E-13	3.22E-12
ORGANIC											
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-07	6.99E-13	9.57E-12
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-12	3.33E-15	1.85E-14
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-08	1.24E-12	2.25E-11
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-17	2.89E-20	1.52E-19
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-09	3.94E-13	2.58E-12
NOBLE GASES											
XE-131M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.55E-12	1.28E-10
XE-133M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.32E-12	8.75E-10
XE-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.86E-10	3.90E-08
XE-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.48E-38	3.16E-37
XE-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.07E-10	1.37E-08
XE-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.46E-34	9.38E-33
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.61E-15	7.56E-14
KR-85M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.38E-12	2.64E-10
KR-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-13	4.47E-10
KR-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E-15	1.42E-13
KR-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E-11	1.11E-10
						0.00E+00	0.00E+00	0.00E+00	3.55E-06	1.49E-09	5.54E-08
						5.59E+01	1.46E+01	5.52E+00	1.17E+03	3.44E+00	6.86E+01

1

QDC CRDA, CR & LPZ, ALL REL GLAND: TID-14844: 0 - 30 d

ISOTOPE	ACTIVITY RELEASED (CURIES)			
	2. HRS	8. HRS	24. HRS	720. HRS
ELEMENTAL				
I-131	1.63E+03	1.16E-35	0.00E+00	0.00E+00
I-132	2.41E+03	9.42E-36	0.00E+00	0.00E+00
I-133	3.75E+03	2.52E-35	0.00E+00	0.00E+00
I-134	4.35E+03	6.23E-36	0.00E+00	0.00E+00

I-135	3.46E+03	2.02E-35	0.00E+00	0.00E+00	3.46E+03
PARTICULATE					
I-131	8.95E+01	6.38E-37	0.00E+00	0.00E+00	8.95E+01
I-132	1.32E+02	5.17E-37	0.00E+00	0.00E+00	1.32E+02
I-133	2.06E+02	1.39E-36	0.00E+00	0.00E+00	2.06E+02
I-134	2.39E+02	3.42E-37	0.00E+00	0.00E+00	2.39E+02
I-135	1.90E+02	1.11E-36	0.00E+00	0.00E+00	1.90E+02
ORGANIC					
I-131	7.16E+01	5.11E-37	0.00E+00	0.00E+00	7.16E+01
I-132	1.06E+02	4.14E-37	0.00E+00	0.00E+00	1.06E+02
I-133	1.65E+02	1.11E-36	0.00E+00	0.00E+00	1.65E+02
I-134	1.91E+02	2.74E-37	0.00E+00	0.00E+00	1.91E+02
I-135	1.52E+02	8.86E-37	0.00E+00	0.00E+00	1.52E+02
NOBLE GASES					
XE-131M	1.36E+03	9.72E-36	0.00E+00	0.00E+00	1.36E+03
XE-133M	1.05E+04	7.35E-35	0.00E+00	0.00E+00	1.05E+04
XE-133	4.13E+05	2.93E-33	0.00E+00	0.00E+00	4.13E+05
XE-135M	1.09E+05	3.65E-36	0.00E+00	0.00E+00	1.09E+05
XE-135	3.89E+05	2.40E-33	0.00E+00	0.00E+00	3.89E+05
XE-138	3.60E+05	2.15E-35	0.00E+00	0.00E+00	3.60E+05
KR-83M	3.20E+04	1.09E-34	0.00E+00	0.00E+00	3.20E+04
KR-85M	8.03E+04	4.20E-34	0.00E+00	0.00E+00	8.03E+04
KR-85	2.70E+03	1.94E-35	0.00E+00	0.00E+00	2.70E+03
KR-87	1.54E+05	3.68E-34	0.00E+00	0.00E+00	1.54E+05
KR-88	2.20E+05	9.57E-34	0.00E+00	0.00E+00	2.20E+05

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 16:56:02.13

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 16:56:11.85

1 QDC CRDA, EAB, ALL REL MVP: TID-14844: 0 - 6 s
 2 2 1 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 7200
 6 0.2402 0.
 7 9.058E-4 0.
 8 2*1.
 9 2*0.
 10 2.9E-4 0.
 11 2*0.
 12 2*0.
 13 2*0.
 14 2*0.
 15 2*0.
 16 2*0.
 17 2*0.
 18 2*0.
 19 2*0.
 20 2*0.
 21 6*1.
 22 3*1.
 23 7.16E+3 1.06E+4 1.65E+4 1.92E+4 1.52E+4 1.36E+3 1.05E+4 4.13E+5
 24 1.11E+5 3.89E+5 3.65E+5 3.21E+4 8.04E+4 2.70E+3 1.55E+5 2.20E+5

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QDC CRDA, EAB, ALL REL MVP: TID-14844: 0 - 6 s

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	7.160E+03
I-132	1.060E+04
I-133	1.650E+04
I-134	1.920E+04
I-135	1.520E+04
XE-131M	1.360E+03
XE-133M	1.050E+04
XE-133	4.130E+05
XE-135M	1.110E+05
XE-135	3.890E+05
XE-138	3.650E+05
KR-83M	3.210E+04
KR-85M	8.040E+04
KR-85	2.700E+03
KR-87	1.550E+05
KR-88	2.200E+05

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QDC CRDA, EAB, ALL REL MVP: TID-14844: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

VOL 1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED

AT .002 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0

CFM X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .78E+02 VOL/DAY PCT PRI LKG TO ATM =

00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	3.85E+02	1.24E+03	4.16E+00	0.00E+00	0.00E+00	6.19E-01	1.12E-04	5.46E-05	0.00E+00	0.00E+00	0.00E+00
I-132	5.70E+02	1.83E+03	6.15E+00	0.00E+00	0.00E+00	3.31E-02	1.07E-03	1.84E-04	0.00E+00	0.00E+00	0.00E+00

KR-88	3.17E+04	1.02E+05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
						0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
						0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
						=====	=====	=====	=====	=====	=====
					TOTAL DOSES 0-30 DAYS	1.29E+00	3.39E-01	1.28E-01	0.00E+00	0.00E+00	0.00E+00

1

QDC CRDA, EAB, ALL REL MVP: TID-14844: 0 - 6 s

ISOTOPE	ACTIVITY RELEASED (CURIES)	
	2. HRS	
ELEMENTAL		
I-131	4.16E+00	4.16E+00
I-132	6.15E+00	6.15E+00
I-133	9.58E+00	9.58E+00
I-134	1.11E+01	1.11E+01
I-135	8.82E+00	8.82E+00
PARTICULATE		
I-131	2.28E-01	2.28E-01
I-132	3.38E-01	3.38E-01
I-133	5.26E-01	5.26E-01
I-134	6.12E-01	6.12E-01
I-135	4.85E-01	4.85E-01
ORGANIC		
I-131	1.83E-01	1.83E-01
I-132	2.70E-01	2.70E-01
I-133	4.21E-01	4.21E-01
I-134	4.89E-01	4.89E-01
I-135	3.88E-01	3.88E-01
NOBLE GASES		
XE-131M	3.47E+00	3.47E+00
XE-133M	2.68E+01	2.68E+01
XE-133	1.05E+03	1.05E+03
XE-135M	2.82E+02	2.82E+02
XE-135	9.92E+02	9.92E+02
XE-138	9.29E+02	9.29E+02
KR-83M	8.19E+01	8.19E+01
KR-85M	2.05E+02	2.05E+02
KR-85	6.89E+00	6.89E+00
KR-87	3.95E+02	3.95E+02
KR-88	5.61E+02	5.61E+02

END EXECUTION DATE: 11/18/1999
 END EXECUTION TIME: 16:56:11.91

Table with columns for radionuclide (e.g., I-133, I-134, PARTICULATE), activity (CURIES), and various exposure parameters (e.g., 0.00E+00, 0.00E+00).

1 QDC CRDA, EAB, ALL REL AOG: TID-14844: 6 s - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED

VOL

AT .500 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0

CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .10E+01 VOL/DAY PCT PRI LKG TO ATM =

00.00

Table with columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Includes rows for ELEMENTAL, PARTICULATE, and ORGANIC.

Table with columns: ISOTOPE, ACTIVITY (CURIES), CONTROL ROOM DOSES (REM), and SITE BOUNDARY DOSES (REM). Includes rows for ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES.

KR-88 2.02E-05 1.90E+05 4.19E+03 0.00E+00 0.00E+00 0.00E+00 5.30E-01 9.53E-02 0.00E+00 0.00E+00 0.00E+00

 0.00E+00 1.91E+00 8.01E-01 0.00E+00 0.00E+00 0.00E+00

1 QDC CRDA, EAB, ALL REL AOG: TID-14844: 6 s - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS
 1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED

VOL

AT 2.000 HOURS: X/Q(SITE)= .23E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0
 CFM X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .10E+01 VOL/DAY PCT. PRI LKG TO ATM =
 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	.000	1.000
PARTICULATE	.000	.000	.000	.000	.000	1.000
ORGANIC	.000	.000	.000	.000	.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	1.15E-35	1.48E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	9.37E-36	1.21E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	2.49E-35	3.23E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	6.27E-36	8.11E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	2.00E-35	2.58E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	6.31E-37	8.16E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	5.15E-37	6.66E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	1.37E-36	1.77E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	3.44E-37	4.46E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	1.10E-36	1.42E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	5.05E-37	6.53E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	4.12E-37	5.33E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	1.10E-36	1.42E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	2.76E-37	3.56E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	8.77E-37	1.13E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	9.60E-36	1.24E+03	8.02E+01	0.00E+00	0.00E+00	0.00E+00	1.02E-05	5.73E-05	0.00E+00	0.00E+00	0.00E+00
XE-133M	7.26E-35	9.40E+03	6.12E+02	0.00E+00	0.00E+00	0.00E+00	1.16E-04	5.02E-04	0.00E+00	0.00E+00	0.00E+00
XE-133	2.90E-33	3.75E+05	2.43E+04	0.00E+00	0.00E+00	0.00E+00	4.19E-03	1.88E-02	0.00E+00	0.00E+00	0.00E+00
XE-135M	3.82E-36	4.95E+02	4.33E+02	0.00E+00	0.00E+00	0.00E+00	1.05E-03	2.22E-04	0.00E+00	0.00E+00	0.00E+00
XE-135	2.37E-33	3.07E+05	2.10E+04	0.00E+00	0.00E+00	0.00E+00	2.96E-02	3.57E-02	0.00E+00	0.00E+00	0.00E+00
XE-138	2.24E-35	2.89E+03	1.82E+03	0.00E+00	0.00E+00	0.00E+00	3.01E-02	7.72E-03	0.00E+00	0.00E+00	0.00E+00
KR-83M	1.09E-34	1.40E+04	1.21E+03	0.00E+00	0.00E+00	0.00E+00	3.49E-05	2.18E-04	0.00E+00	0.00E+00	0.00E+00
KR-85M	4.16E-34	5.38E+04	3.92E+03	0.00E+00	0.00E+00	0.00E+00	3.52E-03	4.83E-03	0.00E+00	0.00E+00	0.00E+00
KR-85	1.92E-35	2.48E+03	1.60E+02	0.00E+00	0.00E+00	0.00E+00	1.93E-06	1.89E-04	0.00E+00	0.00E+00	0.00E+00
KR-87	3.68E-34	4.76E+04	4.78E+03	0.00E+00	0.00E+00	0.00E+00	3.78E-02	2.66E-02	0.00E+00	0.00E+00	0.00E+00
KR-88	9.51E-34	1.23E+05	9.63E+03	0.00E+00	0.00E+00	0.00E+00	9.65E-02	1.74E-02	0.00E+00	0.00E+00	0.00E+00
							0.00E+00	2.03E-01	1.12E-01	0.00E+00	0.00E+00
TOTAL DOSES 0-30 DAYS						0.00E+00	2.11E+00	9.13E-01	0.00E+00	0.00E+00	0.00E+00

1 QDC CRDA, EAB, ALL REL AOG: TID-14844: 6 s - 2 h

ISOTOPE	ACTIVITY RELEASED (CURIES)	
	2. HRS	
ELEMENTAL		
I-131	0.00E+00	0.00E+00
I-132	0.00E+00	0.00E+00
I-133	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00
I-135	0.00E+00	0.00E+00
PARTICULATE		
I-131	0.00E+00	0.00E+00
I-132	0.00E+00	0.00E+00
I-133	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00
I-135	0.00E+00	0.00E+00
ORGANIC		
I-131	0.00E+00	0.00E+00

I-132	0.00E+00	0.00E+00
I-133	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00
I-135	0.00E+00	0.00E+00

NOBLE GASES

XE-131M	1.11E+02	1.11E+02
XE-133M	8.51E+02	8.51E+02
XE-133	3.37E+04	3.37E+04
XE-135M	1.95E+03	1.95E+03
XE-135	2.97E+04	2.97E+04
XE-138	7.05E+03	7.05E+03
KR-83M	1.89E+03	1.89E+03
KR-85M	5.69E+03	5.69E+03
KR-85	2.21E+02	2.21E+02
KR-87	7.92E+03	7.92E+03
KR-88	1.44E+04	1.44E+04

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 16:56:19.05

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 16:56:34.21

1 QDC CRDA, EAB, ALL REL GLAND: TID-14844: 0 - 2 h
 2 3 2 1. 1.
 3 -2561 2.60+6 1:845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 1800 7200
 6 0.2402 2*1.201E-2
 7 3*1.
 8 3*1.
 9 3*0.
 10 2*2.9e-4 2.3E-5
 11 3*0.
 12 3*0.
 13 3*0.
 14 3*0.
 15 3*0.
 16 3*0.
 17 3*0.
 18 3*0.
 19 3*0.
 20 3*0.
 21 6*1.
 22 3*1.
 23 7.16E+3 1.06E+4 1.65E+4 1.92E+4 1.52E+4 1.36E+3 1.05E+4 4.13E+5
 24 1.11E+5 3.89E+5 3.65E+5 3.21E+4 8.04E+4 2.70E+3 1.55E+5 2.20E+5

1

QDC CRDA, EAB, ALL REL GLAND: TID-14844: 0 - 2 h

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	7.160E+03
I-132	1.060E+04
I-133	1.650E+04
I-134	1.920E+04
I-135	1.520E+04
XE-131M	1.360E+03
XE-133M	1.050E+04
XE-133	4.130E+05
XE-135M	1.110E+05
XE-135	3.890E+05
XE-138	3.650E+05
KR-83M	3.210E+04
KR-85M	8.040E+04
KR-85	2.700E+03
KR-87	1.550E+05
KR-88	2.200E+05

1

QDC CRDA, EAB, ALL REL GLAND: TID-14844: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0
 CFM
 X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =
 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH BODY	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	3.85E+02	1.21E+02	1.12E+03	0.00E+00	0.00E+00	1.67E+02	3.02E-02	1.48E-02	0.00E+00	0.00E+00	0.00E+00
I-132	5.70E+02	1.78E+02	1.66E+03	0.00E+00	0.00E+00	8.95E+00	2.89E-01	4.97E-02	0.00E+00	0.00E+00	0.00E+00

I-133	8.88E+02	2.78E+02	2.59E+03	0.00E+00	0.00E+00	1.04E+02	8.95E-02	7.30E-02	0.00E+00	0.00E+00	0.00E+00
I-134	1.03E+03	3.23E+02	3.01E+03	0.00E+00	0.00E+00	7.57E+00	4.23E-01	9.13E-02	0.00E+00	0.00E+00	0.00E+00
I-135	8.18E+02	2.56E+02	2.38E+03	0.00E+00	0.00E+00	2.97E+01	3.07E-01	4.90E-02	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	2.12E+01	6.63E+00	6.17E+01	0.00E+00	0.00E+00	9.19E+00	1.66E-03	8.11E-04	0.00E+00	0.00E+00	0.00E+00
I-132	3.13E+01	9.80E+00	9.13E+01	0.00E+00	0.00E+00	4.92E-01	1.59E-02	2.73E-03	0.00E+00	0.00E+00	0.00E+00
I-133	4.88E+01	1.53E+01	1.42E+02	0.00E+00	0.00E+00	5.72E+00	4.92E-03	4.01E-03	0.00E+00	0.00E+00	0.00E+00
I-134	5.67E+01	1.77E+01	1.65E+02	0.00E+00	0.00E+00	4.16E-01	2.32E-02	5.02E-03	0.00E+00	0.00E+00	0.00E+00
I-135	4.50E+01	1.41E+01	1.31E+02	0.00E+00	0.00E+00	1.63E+00	1.69E-02	2.69E-03	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	1.69E+01	5.30E+00	4.94E+01	0.00E+00	0.00E+00	7.35E+00	1.33E-03	6.49E-04	0.00E+00	0.00E+00	0.00E+00
I-132	2.51E+01	7.84E+00	7.31E+01	0.00E+00	0.00E+00	3.93E-01	1.27E-02	2.18E-03	0.00E+00	0.00E+00	0.00E+00
I-133	3.90E+01	1.22E+01	1.14E+02	0.00E+00	0.00E+00	4.58E+00	3.93E-03	3.21E-03	0.00E+00	0.00E+00	0.00E+00
I-134	4.54E+01	1.42E+01	1.32E+02	0.00E+00	0.00E+00	3.33E-01	1.86E-02	4.01E-03	0.00E+00	0.00E+00	0.00E+00
I-135	3.60E+01	1.13E+01	1.05E+02	0.00E+00	0.00E+00	1.31E+00	1.35E-02	2.15E-03	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	3.22E+02	1.01E+02	9.37E+02	0.00E+00	0.00E+00	0.00E+00	1.50E-03	8.44E-03	0.00E+00	0.00E+00	0.00E+00
XE-133M	2.48E+03	7.77E+02	7.24E+03	0.00E+00	0.00E+00	0.00E+00	1.73E-02	7.48E-02	0.00E+00	0.00E+00	0.00E+00
XE-133	9.77E+04	3.06E+04	2.85E+05	0.00E+00	0.00E+00	0.00E+00	6.19E-01	2.77E+00	0.00E+00	0.00E+00	0.00E+00
XE-135M	2.62E+04	8.18E+03	7.64E+04	0.00E+00	0.00E+00	0.00E+00	2.34E+00	4.94E-01	0.00E+00	0.00E+00	0.00E+00
XE-135	9.20E+04	2.88E+04	2.68E+05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.78E+00	0.00E+00	0.00E+00	0.00E+00
XE-138	8.60E+04	2.69E+04	2.51E+05	0.00E+00	0.00E+00	0.00E+00	5.23E+01	1.34E+01	0.00E+00	0.00E+00	0.00E+00
KR-83M	7.59E+03	2.37E+03	2.21E+04	0.00E+00	0.00E+00	0.00E+00	8.02E-03	5.02E-02	0.00E+00	0.00E+00	0.00E+00
KR-85M	1.90E+04	5.95E+03	5.54E+04	0.00E+00	0.00E+00	0.00E+00	6.27E-01	8.61E-01	0.00E+00	0.00E+00	0.00E+00
KR-85	6.39E+02	2.00E+02	1.86E+03	0.00E+00	0.00E+00	0.00E+00	2.83E-04	2.77E-02	0.00E+00	0.00E+00	0.00E+00
KR-87	3.66E+04	1.15E+04	1.07E+05	0.00E+00	0.00E+00	0.00E+00	1.06E+01	7.48E+00	0.00E+00	0.00E+00	0.00E+00
KR-88	5.20E+04	1.63E+04	1.52E+05	0.00E+00	0.00E+00	0.00E+00	1.92E+01	3.45E+00	0.00E+00	0.00E+00	0.00E+00
						3.49E+02	9.17E+01	3.47E+01	0.00E+00	0.00E+00	0.00E+00

1 QDC CRDA, EAB, ALL REL GLAND: TID-14844: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED

VOL

AT .500 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0
CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =

00.00

CLEANUP RATES (HR-1)					FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	1.69E-07	2.05E-09	5.06E+02	0.00E+00	0.00E+00	7.54E+01	1.36E-02	6.65E-03	0.00E+00	0.00E+00	0.00E+00
I-132	2.16E-07	2.62E-09	7.45E+02	0.00E+00	0.00E+00	4.01E+00	1.30E-01	2.23E-02	0.00E+00	0.00E+00	0.00E+00
I-133	3.84E-07	4.67E-09	1.17E+03	0.00E+00	0.00E+00	4.69E+01	4.03E-02	3.29E-02	0.00E+00	0.00E+00	0.00E+00
I-134	3.04E-07	3.70E-09	1.34E+03	0.00E+00	0.00E+00	3.36E+00	1.88E-01	4.06E-02	0.00E+00	0.00E+00	0.00E+00
I-135	3.41E-07	4.15E-09	1.07E+03	0.00E+00	0.00E+00	1.34E+01	1.38E-01	2.20E-02	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	9.29E-09	1.13E-10	2.78E+01	0.00E+00	0.00E+00	4.14E+00	7.48E-04	3.65E-04	0.00E+00	0.00E+00	0.00E+00
I-132	1.18E-08	1.44E-10	4.09E+01	0.00E+00	0.00E+00	2.20E-01	7.12E-03	1.22E-03	0.00E+00	0.00E+00	0.00E+00
I-133	2.11E-08	2.56E-10	6.40E+01	0.00E+00	0.00E+00	2.58E+00	2.21E-03	1.81E-03	0.00E+00	0.00E+00	0.00E+00
I-134	1.67E-08	2.03E-10	7.34E+01	0.00E+00	0.00E+00	1.85E-01	1.03E-02	2.23E-03	0.00E+00	0.00E+00	0.00E+00
I-135	1.88E-08	2.28E-10	5.89E+01	0.00E+00	0.00E+00	7.35E-01	7.60E-03	1.21E-03	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	7.43E-09	9.03E-11	2.22E+01	0.00E+00	0.00E+00	3.31E+00	5.98E-04	2.92E-04	0.00E+00	0.00E+00	0.00E+00
I-132	9.48E-09	1.15E-10	3.27E+01	0.00E+00	0.00E+00	1.76E-01	5.70E-03	9.78E-04	0.00E+00	0.00E+00	0.00E+00
I-133	1.69E-08	2.05E-10	5.12E+01	0.00E+00	0.00E+00	2.06E+00	1.77E-03	1.45E-03	0.00E+00	0.00E+00	0.00E+00
I-134	1.34E-08	1.63E-10	5.87E+01	0.00E+00	0.00E+00	1.48E-01	8.26E-03	1.78E-03	0.00E+00	0.00E+00	0.00E+00
I-135	1.50E-08	1.82E-10	4.71E+01	0.00E+00	0.00E+00	5.88E-01	6.08E-03	9.68E-04	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	1.41E-07	1.72E-09	4.22E+02	0.00E+00	0.00E+00	0.00E+00	6.74E-04	3.80E-03	0.00E+00	0.00E+00	0.00E+00
XE-133M	1.08E-06	1.32E-08	3.26E+03	0.00E+00	0.00E+00	0.00E+00	7.80E-03	3.37E-02	0.00E+00	0.00E+00	0.00E+00
XE-133	4.28E-05	5.20E-07	1.28E+05	0.00E+00	0.00E+00	0.00E+00	2.79E-01	1.25E+00	0.00E+00	0.00E+00	0.00E+00
XE-135M	3.05E-06	3.70E-08	3.28E+04	0.00E+00	0.00E+00	0.00E+00	1.00E+00	2.12E-01	0.00E+00	0.00E+00	0.00E+00
XE-135	3.89E-05	4.73E-07	1.21E+05	0.00E+00	0.00E+00	0.00E+00	2.15E+00	2.59E+00	0.00E+00	0.00E+00	0.00E+00
XE-138	1.16E-05	1.41E-07	1.08E+05	0.00E+00	0.00E+00	0.00E+00	2.26E+01	5.78E+00	0.00E+00	0.00E+00	0.00E+00
KR-83M	2.77E-06	3.37E-08	9.90E+03	0.00E+00	0.00E+00	0.00E+00	3.59E-03	2.25E-02	0.00E+00	0.00E+00	0.00E+00
KR-85M	7.72E-06	9.39E-08	2.49E+04	0.00E+00	0.00E+00	0.00E+00	2.82E-01	3.87E-01	0.00E+00	0.00E+00	0.00E+00
KR-85	2.81E-07	3.41E-09	8.39E+02	0.00E+00	0.00E+00	0.00E+00	1.28E-04	1.25E-02	0.00E+00	0.00E+00	0.00E+00
KR-87	1.23E-05	1.49E-07	4.76E+04	0.00E+00	0.00E+00	0.00E+00	4.75E+00	3.34E+00	0.00E+00	0.00E+00	0.00E+00

KR-88 2.02E-05 2.46E-07 6.80E+04 0.00E+00 0.00E+00 0.00E+00 8.60E+00 1.55E+00 0.00E+00 0.00E+00 0.00E+00
 1.57E+02 4.02E+01 1.53E+01 0.00E+00 0.00E+00 0.00E+00

1 QDC CRDA, EAB, ALL REL GLAND: TID-14844: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS
 1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED

VOL

AT 2.000 HOURS: X/Q(SITE)= .23E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0
 CFM X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =
 00.00

ISOTOPE	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS			CONTROL ROOM DOSES (REM)			SITE BOUNDARY DOSES (REM)		
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA	
ELEMENTAL	.000	.000	.000	.000	1.000	1.000							
PARTICULATE	.000	.000	.000	.000	1.000	1.000							
ORGANIC	.000	.000	.000	.000	1.000	1.000							
I-131	1.15E-35	1.40E-37	1.71E-07	0.00E+00	0.00E+00	0.00E+00	2.02E-09	3.65E-13	1.78E-13	0.00E+00	0.00E+00	0.00E+00	
I-132	9.37E-36	1.14E-37	2.17E-07	0.00E+00	0.00E+00	0.00E+00	9.25E-11	2.99E-12	5.14E-13	0.00E+00	0.00E+00	0.00E+00	
I-133	2.49E-35	3.03E-37	3.88E-07	0.00E+00	0.00E+00	0.00E+00	1.24E-09	1.06E-12	8.69E-13	0.00E+00	0.00E+00	0.00E+00	
I-134	6.27E-36	7.62E-38	3.03E-07	0.00E+00	0.00E+00	0.00E+00	6.04E-11	3.37E-12	7.28E-13	0.00E+00	0.00E+00	0.00E+00	
I-135	2.00E-35	2.43E-37	3.45E-07	0.00E+00	0.00E+00	0.00E+00	3.41E-10	3.53E-12	5.62E-13	0.00E+00	0.00E+00	0.00E+00	
PARTICULATE													
I-131	6.31E-37	7.67E-39	9.40E-09	0.00E+00	0.00E+00	0.00E+00	1.11E-10	2.00E-14	9.79E-15	0.00E+00	0.00E+00	0.00E+00	
I-132	5.15E-37	6.26E-39	1.19E-08	0.00E+00	0.00E+00	0.00E+00	5.08E-12	1.64E-13	2.82E-14	0.00E+00	0.00E+00	0.00E+00	
I-133	1.37E-36	1.67E-38	2.13E-08	0.00E+00	0.00E+00	0.00E+00	6.81E-11	5.85E-14	4.77E-14	0.00E+00	0.00E+00	0.00E+00	
I-134	3.44E-37	4.19E-39	1.66E-08	0.00E+00	0.00E+00	0.00E+00	3.32E-12	1.85E-13	4.00E-14	0.00E+00	0.00E+00	0.00E+00	
I-135	1.10E-36	1.33E-38	1.89E-08	0.00E+00	0.00E+00	0.00E+00	1.87E-11	1.94E-13	3.09E-14	0.00E+00	0.00E+00	0.00E+00	
ORGANIC													
I-131	5.05E-37	6.13E-39	7.52E-09	0.00E+00	0.00E+00	0.00E+00	8.88E-11	1.60E-14	7.84E-15	0.00E+00	0.00E+00	0.00E+00	
I-132	4.12E-37	5.01E-39	9.53E-09	0.00E+00	0.00E+00	0.00E+00	4.07E-12	1.31E-13	2.26E-14	0.00E+00	0.00E+00	0.00E+00	
I-133	1.10E-36	1.33E-38	1.71E-08	0.00E+00	0.00E+00	0.00E+00	5.45E-11	4.68E-14	3.82E-14	0.00E+00	0.00E+00	0.00E+00	
I-134	2.76E-37	3.35E-39	1.33E-08	0.00E+00	0.00E+00	0.00E+00	2.65E-12	1.48E-13	3.20E-14	0.00E+00	0.00E+00	0.00E+00	
I-135	8.77E-37	1.07E-38	1.52E-08	0.00E+00	0.00E+00	0.00E+00	1.50E-11	1.55E-13	2.47E-14	0.00E+00	0.00E+00	0.00E+00	
NOBLE GASES													
XE-131M	9.60E-36	1.17E-37	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-14	1.02E-13	0.00E+00	0.00E+00	0.00E+00	
XE-133M	7.26E-35	8.83E-37	1.10E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.08E-13	9.00E-13	0.00E+00	0.00E+00	0.00E+00	
XE-133	2.90E-33	3.52E-35	4.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.47E-12	3.35E-11	0.00E+00	0.00E+00	0.00E+00	
XE-135M	3.82E-36	4.65E-38	2.90E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.05E-12	1.49E-12	0.00E+00	0.00E+00	0.00E+00	
XE-135	2.37E-33	2.88E-35	3.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.56E-11	6.70E-11	0.00E+00	0.00E+00	0.00E+00	
XE-138	2.24E-35	2.72E-37	1.11E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-10	4.70E-11	0.00E+00	0.00E+00	0.00E+00	
KR-83M	1.09E-34	1.32E-36	2.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.00E-14	5.00E-13	0.00E+00	0.00E+00	0.00E+00	
KR-85M	4.16E-34	5.06E-36	7.79E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.99E-12	9.60E-12	0.00E+00	0.00E+00	0.00E+00	
KR-85	1.92E-35	2.33E-37	2.84E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.43E-15	3.35E-13	0.00E+00	0.00E+00	0.00E+00	
KR-87	3.68E-34	4.48E-36	1.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.68E-11	6.80E-11	0.00E+00	0.00E+00	0.00E+00	
KR-88	9.51E-34	1.16E-35	2.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.04E-10	3.67E-11	0.00E+00	0.00E+00	0.00E+00	
							4.12E-09	5.74E-10	2.68E-10	0.00E+00	0.00E+00	0.00E+00	
							*****	*****	*****	*****	*****	*****	
							TOTAL DOSES 0-30 DAYS	5.06E+02	1.32E+02	5.00E+01	0.00E+00	0.00E+00	0.00E+00

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QDC CRDA, EAB, ALL REL GLAND: TID-14844: 0 - 2 h

ISOTOPE	ACTIVITY RELEASED (CURIES)	
	2. HRS	
ELEMENTAL		
I-131	1.63E+03	1.63E+03
I-132	2.41E+03	2.41E+03
I-133	3.75E+03	3.75E+03
I-134	4.35E+03	4.35E+03
I-135	3.46E+03	3.46E+03
PARTICULATE		
I-131	8.95E+01	8.95E+01
I-132	1.32E+02	1.32E+02
I-133	2.06E+02	2.06E+02
I-134	2.39E+02	2.39E+02
I-135	1.90E+02	1.90E+02
ORGANIC		
I-131	7.16E+01	7.16E+01

I-132	1.06E+02	1.06E+02
I-133	1.65E+02	1.65E+02
I-134	1.91E+02	1.91E+02
I-135	1.52E+02	1.52E+02

NOBLE GASES

XE-131M	1.36E+03	1.36E+03
XE-133M	1.05E+04	1.05E+04
XE-133	4.13E+05	4.13E+05
XE-135M	1.09E+05	1.09E+05
XE-135	3.89E+05	3.89E+05
XE-138	3.60E+05	3.60E+05
KR-83M	3.20E+04	3.20E+04
KR-85M	8.03E+04	8.03E+04
KR-85	2.70E+03	2.70E+03
KR-87	1.54E+05	1.54E+05
KR-88	2.20E+05	2.20E+05

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 16:56:34.26

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 17:18:57.35

1 QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s
 2 2 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 2.592E6
 6 0.2402 0.
 7 9.058E-4 0.
 8 2*1.
 9 2*2460
 10 3.2E-5 0.
 11 7.00E-4 0.
 12 2*0.
 13 2*0.
 14 2*0.
 15 2*0.
 16 2*0.
 17 2*0.
 18 2*0.
 19 2*0.
 20 2*0.
 21 6*1.
 22 3*1.
 23 6.76E+3 9.73E+3 1.36E+4 1.57E+4 1.22E+4 1.21E+3 8.18E+3 3.40E+5
 24 9.21E+4 1.12E+5 3.07E+5 1.82E+4 4.99E+4 2.28E+3 9.80E+4 1.42E+5

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QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	6.760E+03
I-132	9.730E+03
I-133	1.360E+04
I-134	1.570E+04
I-135	1.220E+04
XE-131M	1.210E+03
XE-133M	8.180E+03
XE-133	3.400E+05
XE-135M	9.210E+04
XE-135	1.120E+05
XE-138	3.070E+05
KR-83M	1.820E+04
KR-85M	4.990E+04
KR-85	2.280E+03
KR-87	9.800E+04
KR-88	1.420E+05

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QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .78E+02 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH BODY	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	3.64E+02	1.17E+03	3.92E+00	3.19E-03	6.10E-07	6.45E-02	1.16E-05	5.69E-06	6.94E-04	4.48E-09	6.13E-08
I-132	5.24E+02	1.68E+03	5.65E+00	4.58E-03	8.78E-07	3.35E-03	1.08E-04	1.86E-05	3.61E-05	3.61E-08	2.00E-07
I-133	7.32E+02	2.35E+03	7.89E+00	6.41E-03	1.23E-06	3.51E-02	3.01E-05	2.46E-05	3.78E-04	1.45E-08	2.65E-07
I-134	8.44E+02	2.71E+03	9.10E+00	7.39E-03	1.41E-06	2.53E-03	1.41E-04	3.05E-05	2.72E-05	6.24E-08	3.28E-07

I-135	6.57E+02	2.11E+03	7.08E+00	5.75E-03	1.10E-06	9.75E-03	1.01E-04	1.60E-05	1.05E-04	2.64E-08	1.73E-07
PARTICULATE											
I-131	2.00E+01	6.43E+01	2.16E-01	1.75E-04	3.35E-08	3.54E-03	6.40E-07	3.13E-07	3.82E-05	2.46E-10	3.37E-09
I-132	2.88E+01	9.25E+01	3.10E-01	2.52E-04	4.82E-08	1.84E-04	5.96E-06	1.02E-06	1.98E-06	1.98E-09	1.10E-08
I-133	4.02E+01	1.29E+02	4.34E-01	3.52E-04	6.74E-08	1.93E-03	1.65E-06	1.35E-06	2.07E-05	7.98E-10	1.45E-08
I-134	4.64E+01	1.49E+02	5.00E-01	4.06E-04	7.77E-08	1.39E-04	7.76E-06	1.68E-06	1.50E-06	3.43E-09	1.80E-08
I-135	3.61E+01	1.16E+02	3.89E-01	3.16E-04	6.05E-08	5.36E-04	5.54E-06	8.82E-07	5.77E-06	1.45E-09	9.50E-09
ORGANIC											
I-131	1.60E+01	5.14E+01	1.72E-01	1.40E-04	2.68E-08	2.83E-03	5.12E-07	2.50E-07	3.05E-05	1.97E-10	2.69E-09
I-132	2.30E+01	7.40E+01	2.48E-01	2.02E-04	3.86E-08	1.47E-04	4.76E-06	8.18E-07	1.59E-06	1.58E-09	8.81E-09
I-133	3.22E+01	1.03E+02	3.47E-01	2.82E-04	5.39E-08	1.54E-03	1.32E-06	1.08E-06	1.66E-05	6.38E-10	1.16E-08
I-134	3.71E+01	1.19E+02	4.00E-01	3.25E-04	6.22E-08	1.11E-04	6.21E-06	1.34E-06	1.20E-06	2.74E-09	1.44E-08
I-135	2.89E+01	9.28E+01	3.11E-01	2.53E-04	4.84E-08	4.28E-04	4.43E-06	7.05E-07	4.62E-06	1.16E-09	7.60E-09
NOBLE GASES											
XE-131M	2.86E+02	9.21E+02	3.09E+00	2.51E-03	4.80E-07	0.00E+00	5.43E-07	3.07E-06	0.00E+00	9.15E-10	3.30E-08
XE-133M	1.94E+03	6.22E+03	2.09E+01	1.70E-02	3.24E-06	0.00E+00	5.51E-06	2.38E-05	0.00E+00	2.73E-09	2.56E-07
XE-133	8.05E+04	2.59E+05	8.67E+02	7.05E-01	1.35E-04	0.00E+00	2.08E-04	9.32E-04	0.00E+00	2.54E-07	1.00E-05
XE-135M	2.17E+04	6.98E+04	2.34E+02	1.90E-01	3.64E-05	0.00E+00	7.91E-04	1.67E-04	0.00E+00	3.12E-07	1.80E-06
XE-135	2.65E+04	8.52E+04	2.86E+02	2.32E-01	4.44E-05	0.00E+00	5.62E-04	6.77E-04	0.00E+00	2.16E-07	7.29E-06
XE-138	7.24E+04	2.33E+05	7.81E+02	6.34E-01	1.21E-04	0.00E+00	1.79E-02	4.60E-03	0.00E+00	4.95E-05	
KR-83M	4.30E+03	1.38E+04	4.64E+01	3.77E-02	7.21E-06	0.00E+00	1.86E-06	1.16E-05	0.00E+00	1.09E-08	1.25E-07
KR-85M	1.18E+04	3.80E+04	1.27E+02	1.03E-01	1.98E-05	0.00E+00	1.59E-04	2.18E-04	0.00E+00	6.57E-08	2.35E-06
KR-85	5.40E+02	1.73E+03	5.82E+00	4.72E-03	9.04E-07	0.00E+00	9.77E-08	9.55E-06	0.00E+00	3.85E-11	1.03E-07
KR-87	2.32E+04	7.45E+04	2.50E+02	2.03E-01	3.88E-05	0.00E+00	2.75E-03	1.93E-03	0.00E+00	5.27E-07	2.08E-05
KR-88	3.36E+04	1.08E+05	3.62E+02	2.94E-01	5.63E-05	0.00E+00	5.05E-03	9.09E-04	0.00E+00	1.67E-06	9.79E-06
						1.27E-01	2.79E-02	9.59E-03	1.36E-03	5.04E-06	1.03E-04

1 QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 720.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)		CONTROL ROOM DOSES (REM)			
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	2.75E+01	8.83E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E+00	9.05E-06	1.24E-04
I-132	3.15E-92	1.01E-91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.33E-02	5.32E-05	2.96E-04
I-133	3.48E-08	1.12E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.36E-01	2.83E-05	5.16E-04
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E-02	6.34E-05	3.33E-04
I-135	3.24E-30	1.04E-29	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-01	4.75E-05	3.11E-04
PARTICULATE											
I-131	1.51E+00	4.85E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.71E-02	4.97E-07	6.80E-06
I-132	1.73E-93	5.57E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.93E-03	2.92E-06	1.62E-05
I-133	1.91E-09	6.15E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.04E-02	1.56E-06	2.83E-05
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-03	3.48E-06	1.83E-05
I-135	1.78E-31	5.72E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-02	2.61E-06	1.71E-05
ORGANIC											
I-131	1.21E+00	3.88E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.17E-02	3.98E-07	5.44E-06
I-132	1.39E-93	4.46E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E-03	2.34E-06	1.30E-05
I-133	1.53E-09	4.92E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.24E-02	1.24E-06	2.27E-05
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-03	2.79E-06	1.47E-05
I-135	1.42E-31	4.57E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.30E-03	2.09E-06	1.37E-05
NOBLE GASES											
XE-131M	4.93E+01	1.58E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-06	6.69E-05
XE-133M	1.95E-01	6.28E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.45E-06	5.12E-04
XE-133	1.57E+03	5.03E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.12E-04	2.02E-02
XE-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-04	8.43E-04
XE-135	4.69E-20	1.51E-19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.01E-04	1.35E-02
XE-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.34E-04	2.53E-02
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.52E-05	1.73E-04
KR-85M	5.85E-46	1.88E-45	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.11E-04	3.99E-03
KR-85	5.37E+02	1.73E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.81E-08	2.09E-04
KR-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.36E-04	2.51E-02
KR-88	1.20E-73	3.85E-73	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.58E-03	1.52E-02
						0.00E+00	0.00E+00	0.00E+00	2.65E+00	5.57E-03	1.07E-01

TOTAL DOSES 0-30 DAYS ***** ***** ***** ***** ***** *****
 1.27E-01 2.79E-02 9.59E-03 2.65E+00 5.57E-03 1.07E-01

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QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

ISOTOPE	ACTIVITY RELEASED (CURIES)		
	0. HRS	720. HRS	
ELEMENTAL			
I-131	3.92E+00	0.00E+00	3.92E+00
I-132	5.65E+00	0.00E+00	5.65E+00
I-133	7.89E+00	0.00E+00	7.89E+00
I-134	9.10E+00	0.00E+00	9.10E+00
I-135	7.08E+00	0.00E+00	7.08E+00
PARTICULATE			
I-131	2.16E-01	0.00E+00	2.16E-01
I-132	3.10E-01	0.00E+00	3.10E-01
I-133	4.34E-01	0.00E+00	4.34E-01
I-134	5.00E-01	0.00E+00	5.00E-01
I-135	3.89E-01	0.00E+00	3.89E-01
ORGANIC			
I-131	1.72E-01	0.00E+00	1.72E-01
I-132	2.48E-01	0.00E+00	2.48E-01
I-133	3.47E-01	0.00E+00	3.47E-01
I-134	4.00E-01	0.00E+00	4.00E-01
I-135	3.11E-01	0.00E+00	3.11E-01
NOBLE GASES			
XE-131M	3.09E+00	0.00E+00	3.09E+00
XE-133M	2.09E+01	0.00E+00	2.09E+01
XE-133	8.67E+02	0.00E+00	8.67E+02
XE-135M	2.34E+02	0.00E+00	2.34E+02
XE-135	2.86E+02	0.00E+00	2.86E+02
XE-138	7.81E+02	0.00E+00	7.81E+02
KR-83M	4.64E+01	0.00E+00	4.64E+01
KR-85M	1.27E+02	0.00E+00	1.27E+02
KR-85	5.82E+00	0.00E+00	5.82E+00
KR-87	2.50E+02	0.00E+00	2.50E+02
KR-88	3.62E+02	0.00E+00	3.62E+02

END EXECUTION DATE: 11/18/1999
 END EXECUTION TIME: 17:18:57.41

I-135	6.57E+02	2.11E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE												
I-131	2.00E+01	6.43E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	2.88E+01	9.25E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	4.02E+01	1.29E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	4.64E+01	1.49E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	3.61E+01	1.16E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC												
I-131	1.60E+01	5.14E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	2.30E+01	7.40E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	3.22E+01	1.03E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	3.71E+01	1.19E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	2.89E+01	9.28E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES												
XE-131M	2.86E+02	9.21E+02	3.09E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-133M	1.94E+03	6.22E+03	2.09E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-133	8.05E+04	2.59E+05	8.67E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-135M	2.17E+04	6.98E+04	2.34E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-135	2.65E+04	8.52E+04	2.86E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
XE-138	7.24E+04	2.33E+05	7.81E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-83M	4.30E+03	1.38E+04	4.64E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-85M	1.18E+04	3.80E+04	1.27E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-85	5.40E+02	1.73E+03	5.82E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-87	2.32E+04	7.45E+04	2.50E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
KR-88	3.36E+04	1.08E+05	3.62E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
						0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

1 QDC CRDA, CR & LPZ, ALL REL AOG: SIEMENS 20 GWD/MTU: 6 s - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO

SPRAYED VOL

AT .500 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .10E+01 VOL/DAY PCT PRI LKG TO ATM =

00.00

ISOTOPE	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS			ACTIVITY (CURIES)					
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER	PRIMARY	SECONDARY	RELEASE	CONTROL ROOM (UCI/CM3)	THYROID	WH BODY	BETA
ELEMENTAL	.000	.000	.000	.000	.000	1.000							
PARTICULATE	.000	.000	.000	.000	.000	1.000							
ORGANIC	.000	.000	.000	.000	.000	1.000							
I-131	1.60E-07	1.50E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	1.98E-07	1.86E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	3.16E-07	2.97E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	2.49E-07	2.34E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	2.74E-07	2.58E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE													
I-131	8.77E-09	8.24E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	1.09E-08	1.02E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	1.74E-08	1.63E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	1.37E-08	1.29E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	1.51E-08	1.42E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC													
I-131	7.01E-09	6.59E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	8.70E-09	8.18E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	1.39E-08	1.31E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	1.09E-08	1.03E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	1.20E-08	1.13E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES													
XE-131M	1.26E-07	1.18E+03	2.45E+01	1.64E-02	3.15E-06	0.00E+00	4.31E-06	2.44E-05	0.00E+00	2.57E-06	9.28E-05		
XE-133M	8.45E-07	7.94E+03	1.65E+02	1.11E-01	2.12E-05	0.00E+00	4.36E-05	1.89E-04	0.00E+00	7.64E-06	7.18E-04		
XE-133	3.52E-05	3.31E+05	6.88E+03	4.61E+00	8.83E-04	0.00E+00	1.65E-03	7.39E-03	0.00E+00	7.13E-04	2.82E-02		
XE-135M	2.53E-06	2.38E+04	1.02E+03	3.31E-01	6.33E-05	0.00E+00	3.45E-03	7.30E-04	0.00E+00	3.85E-04	2.22E-03		
XE-135	1.12E-05	1.05E+05	2.23E+03	1.47E+00	2.81E-04	0.00E+00	4.38E-03	5.28E-03	0.00E+00	5.93E-04	2.00E-02		
XE-138	9.73E-06	9.14E+04	3.61E+03	1.27E+00	2.44E-04	0.00E+00	8.30E-02	2.13E-02	0.00E+00	2.45E-03	6.65E-02		
KR-83M	1.57E-06	1.48E+04	3.36E+02	2.06E-01	3.94E-05	0.00E+00	1.35E-05	8.42E-05	0.00E+00	2.72E-05	3.12E-04		
KR-85M	4.79E-06	4.51E+04	9.72E+02	6.27E-01	1.20E-04	0.00E+00	1.21E-03	1.67E-03	0.00E+00	1.76E-04	6.28E-03		
KR-85	2.37E-07	2.23E+03	4.62E+01	3.10E-02	5.94E-06	0.00E+00	7.76E-07	7.58E-05	0.00E+00	1.08E-07	2.89E-04		
KR-87	7.75E-06	7.28E+04	1.74E+03	1.01E+00	1.94E-04	0.00E+00	1.91E-02	1.34E-02	0.00E+00	1.24E-03	4.90E-02		
KR-88	1.30E-05	1.23E+05	2.71E+03	1.71E+00	3.27E-04	0.00E+00	3.77E-02	6.79E-03	0.00E+00	4.32E-03	2.54E-02		
						0.00E+00	1.51E-01	5.69E-02	0.00E+00	9.92E-03	1.99E-01		

ELEMENTAL											
I-131	0.00E+00	1.07E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	1.42E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	1.70E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	4.27E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	8.68E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	0.00E+00	5.87E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	7.81E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	9.33E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	2.35E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	4.77E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	0.00E+00	4.70E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	6.24E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	7.47E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	1.88E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	3.82E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	0.00E+00	8.48E+02	2.43E+02	6.57E-04	1.26E-07	0.00E+00	1.20E-05	6.78E-05	0.00E+00	2.93E-05	1.06E-03
XE-133M	0.00E+00	5.28E+03	1.56E+03	4.09E-03	7.83E-07	0.00E+00	1.16E-04	5.01E-04	0.00E+00	8.44E-05	7.93E-03
XE-133	0.00E+00	2.33E+05	6.72E+04	1.80E-01	3.45E-05	0.00E+00	4.54E-03	2.03E-02	0.00E+00	8.04E-03	3.18E-01
XE-135M	0.00E+00	3.65E-05	6.32E+00	2.83E-11	5.42E-15	0.00E+00	6.00E-06	1.27E-06	0.00E+00	1.10E-05	6.36E-05
XE-135	0.00E+00	4.36E+04	1.58E+04	3.38E-02	6.47E-06	0.00E+00	8.76E-03	1.06E-02	0.00E+00	5.45E-03	1.84E-01
XE-138	0.00E+00	1.22E-03	4.19E+01	9.45E-10	1.81E-13	0.00E+00	2.71E-04	6.94E-05	0.00E+00	1.25E-04	3.39E-03
KR-83M	0.00E+00	6.70E+02	7.36E+02	5.19E-04	9.93E-08	0.00E+00	8.28E-06	5.18E-05	0.00E+00	1.13E-04	1.30E-03
KR-85M	0.00E+00	1.01E+04	4.87E+03	7.83E-03	1.50E-06	0.00E+00	1.71E-03	2.35E-03	0.00E+00	1.28E-03	4.59E-02
KR-85	0.00E+00	1.63E+03	4.63E+02	1.26E-03	2.42E-07	0.00E+00	2.19E-06	2.14E-04	0.00E+00	1.24E-06	3.31E-03
KR-87	0.00E+00	8.80E+02	2.07E+03	6.81E-04	1.30E-07	0.00E+00	6.40E-03	4.49E-03	0.00E+00	3.33E-03	1.31E-01
KR-88	0.00E+00	1.40E+04	9.42E+03	1.08E-02	2.08E-06	0.00E+00	3.69E-02	6.65E-03	0.00E+00	2.48E-02	1.46E-01
						0.00E+00	5.88E-02	4.53E-02	0.00E+00	4.32E-02	8.42E-01

1 QDC CRDA, CR & LPZ, ALL REL AOG: SIEMENS 20 GWD/MTU: 6 s - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 24.000 HOURS: X/Q(SITE)= .30E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .38E-05 SEC/M3 SEC RELEASE RATE= .10E+01 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	.000	1.000
PARTICULATE	.000	.000	.000	.000	.000	1.000
ORGANIC	.000	.000	.000	.000	.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	0.00E+00	5.18E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	5.88E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	5.14E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	6.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	8.54E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	0.00E+00	2.85E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	3.23E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	2.83E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	3.37E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	4.69E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	0.00E+00	2.28E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	2.58E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	2.26E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	2.70E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	3.75E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	0.00E+00	4.19E+02	4.06E+02	1.02E-04	1.95E-08	0.00E+00	6.69E-06	3.78E-05	0.00E+00	1.74E-06	6.26E-05
XE-133M	0.00E+00	2.21E+03	2.35E+03	5.37E-04	1.03E-07	0.00E+00	5.81E-05	2.51E-04	0.00E+00	4.49E-06	4.21E-04
XE-133	0.00E+00	1.09E+05	1.09E+05	2.66E-02	5.09E-06	0.00E+00	2.45E-03	1.10E-02	0.00E+00	4.62E-04	1.83E-02
XE-135M	0.00E+00	5.78E-24	5.63E-07	1.40E-30	2.69E-34	0.00E+00	1.78E-13	3.77E-14	0.00E+00	2.37E-14	1.37E-13
XE-135	0.00E+00	6.64E+03	1.31E+04	1.61E-03	3.09E-07	0.00E+00	2.42E-03	2.91E-03	0.00E+00	1.56E-04	5.25E-03
XE-138	0.00E+00	1.94E-20	2.10E-05	4.70E-27	9.00E-31	0.00E+00	4.52E-11	1.16E-11	0.00E+00	1.53E-12	4.14E-11
KR-83M	0.00E+00	9.12E-01	6.76E+01	2.22E-07	4.24E-11	0.00E+00	2.53E-07	1.59E-06	0.00E+00	3.29E-07	3.76E-06
KR-85M	0.00E+00	4.16E+02	2.02E+03	1.01E-04	1.94E-08	0.00E+00	2.37E-04	3.26E-04	0.00E+00	1.80E-05	6.43E-04
KR-85	0.00E+00	8.37E+02	7.93E+02	2.03E-04	3.89E-08	0.00E+00	1.25E-06	1.22E-04	0.00E+00	7.55E-08	2.02E-04

KR-87	0.00E+00	7.12E-02	6.22E+01	1.73E-08	3.31E-12	0.00E+00	6.42E-05	4.51E-05	0.00E+00	3.00E-06	1.18E-04
KR-88	0.00E+00	1.37E+02	2.00E+03	3.32E-05	6.35E-09	0.00E+00	2.61E-03	4.70E-04	0.00E+00	1.72E-04	1.01E-03
						0.00E+00	7.84E-03	1.51E-02	0.00E+00	8.17E-04	2.60E-02

1 QDC CRDA, CR & LPZ, ALL REL AOG: SIEMENS 20 GWD/MTU: 6 s - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 720.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	.000	1.000
PARTICULATE	.000	.000	.000	.000	.000	1.000
ORGANIC	.000	.000	.000	.000	.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA		
ELEMENTAL											
I-131	0.00E+00	4.26E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	4.89E-92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	5.41E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	5.02E-30	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	0.00E+00	2.34E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	2.69E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	2.97E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	2.76E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	0.00E+00	1.87E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	2.15E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	2.38E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	2.21E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	0.00E+00	7.64E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.52E-08	2.71E-06
XE-133M	0.00E+00	3.03E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-07	1.62E-05
XE-133	0.00E+00	2.43E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.93E-05	7.64E-04
XE-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-33	6.23E-33
XE-135	0.00E+00	7.28E-20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.79E-06	9.40E-05
XE-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.94E-30	1.88E-28
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.92E-11	1.02E-09
KR-85M	0.00E+00	9.07E-46	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E-07	3.90E-06
KR-85	0.00E+00	8.33E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.36E-09	8.98E-06
KR-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.42E-11	2.14E-09
KR-88	0.00E+00	1.86E-73	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-07	1.71E-06
						0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-05	8.92E-04
TOTAL DOSES 0-30 DAYS						0.00E+00	2.67E-01	1.42E-01	0.00E+00	1.16E-01	2.22E+00

1 QDC CRDA, CR & LPZ, ALL REL AOG: SIEMENS 20 GWD/MTU: 6 s - 30 d

ISOTOPE	ACTIVITY RELEASED (CURIES)				
	2. HRS	8. HRS	24. HRS	720. HRS	
ELEMENTAL					
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE					
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC					
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES					
XE-131M	9.90E+01	2.43E+02	4.06E+02	0.00E+00	7.47E+02
XE-133M	6.63E+02	1.56E+03	2.35E+03	0.00E+00	4.57E+03
XE-133	2.77E+04	6.72E+04	1.09E+05	0.00E+00	2.04E+05
XE-135M	1.62E+03	6.32E+00	5.63E-07	0.00E+00	1.62E+03
XE-135	8.55E+03	1.58E+04	1.31E+04	0.00E+00	3.75E+04
XE-138	5.93E+03	4.19E+01	2.10E-05	0.00E+00	5.97E+03
KR-83M	1.07E+03	7.36E+02	6.76E+01	0.00E+00	1.87E+03
KR-85M	3.53E+03	4.87E+03	2.02E+03	0.00E+00	1.04E+04
KR-85	1.87E+02	4.63E+02	7.93E+02	0.00E+00	1.44E+03
KR-87	5.01E+03	2.07E+03	6.22E+01	0.00E+00	7.14E+03
KR-88	9.28E+03	9.42E+03	2.00E+03	0.00E+00	2.07E+04

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 17:19:27.40

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 17:19:18.72

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d
 2 6 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 1800 7200 2.88+4 8.64+4 2.592E6
 6 0.2402 4*1.201E-2 0.
 7 5*1. 0.
 8 6*1.
 9 6*2460
 10 2*3.2E-5 2*9.0E-6 3.0E-6 0.
 11 3*7.00E-4 6.45E-6 3.81E-6 0.
 12 6*0.
 13 6*0.
 14 6*0.
 15 6*0.
 16 6*0.
 17 6*0.
 18 6*0.
 19 6*0.
 20 6*0.
 21 6*1.
 22 3*1.
 23 6.76E+3 9.73E+3 1.36E+4 1.57E+4 1.22E+4 1.21E+3 8.18E+3 3.40E+5
 24 9.21E+4 1.12E+5 3.07E+5 1.82E+4 4.99E+4 2.28E+3 9.80E+4 1.42E+5

1

QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	6.760E+03
I-132	9.730E+03
I-133	1.360E+04
I-134	1.570E+04
I-135	1.220E+04
XE-131M	1.210E+03
XE-133M	8.180E+03
XE-133	3.400E+05
XE-135M	9.210E+04
XE-135	1.120E+05
XE-138	3.070E+05
KR-83M	1.820E+04
KR-85M	4.990E+04
KR-85	2.280E+03
KR-87	9.800E+04
KR-88	1.420E+05

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QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO
 SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM
 INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =
 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	3.64E+02	1.14E+02	1.06E+03	8.61E-01	1.65E-04	1.74E+01	3.15E-03	1.54E-03	2.62E-01	1.69E-06	2.31E-05
I-132	5.24E+02	1.64E+02	1.53E+03	1.24E+00	2.37E-04	9.06E-01	2.93E-02	5.03E-03	1.36E-02	1.36E-05	7.56E-05
I-133	7.32E+02	2.29E+02	2.13E+03	1.73E+00	3.32E-04	9.47E+00	8.14E-03	6.64E-03	1.42E-01	5.48E-06	9.98E-05
I-134	8.44E+02	2.64E+02	2.46E+03	2.00E+00	3.82E-04	6.83E-01	3.82E-02	8.24E-03	1.03E-02	2.36E-05	1.24E-04

Table with 12 columns of numerical data. Rows are categorized by PARTICULATE, ORGANIC, and NOBLE GASES. Includes isotope identifiers like I-135, I-131, I-132, I-133, I-134, I-135, KR-85M, KR-87, KR-88, and XE-131M, XE-133M, XE-133, XE-135M, XE-135, XE-138, KR-83M, KR-85M, KR-85, KR-87, KR-88.

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO

SPRAYED VOL

AT .500 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =

00.00

Table with 7 columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Sub-columns include SPRAY, PRIMARY, SECONDARY, CONT CENTER, RELEASE, and CONT CENTER. Rows include ELEMENTAL, PARTICULATE, and ORGANIC.

Table with 12 columns: ACTIVITY (CURIES), CONTROL ROOM DOSES (REM), and SITE BOUNDARY DOSES (REM). Sub-columns include ISOTOPE, PRIMARY, SECONDARY, RELEASE, (CURIES), (UCI/CM3), THYROID, WH BODY, BETA, THYROID, WH BODY, BETA. Rows include ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES with various isotope identifiers.

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 2.000 HOURS: X/Q(SITE)= .90E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Includes sub-sections for ELEMENTAL, PARTICULATE, ORGANIC, NOBLE GASES, and ISOTOPE activity data.

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 8.000 HOURS: X/Q(SITE)= .90E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .65E-05 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Includes sub-sections for ELEMENTAL, PARTICULATE, ORGANIC, and ISOTOPE activity data.

ELEMENTAL												
I-131	0.00E+00	0.00E+00	1.10E-35	2.03E-03	3.88E-07	5.07E-38	9.15E-42	4.47E-42	1.10E+02	7.09E-04	9.71E-03	
I-132	0.00E+00	0.00E+00	8.64E-36	2.70E-04	5.16E-08	1.44E-39	4.67E-41	8.02E-42	2.32E+00	2.31E-03	1.29E-02	
I-133	0.00E+00	0.00E+00	2.08E-35	3.23E-03	6.17E-07	2.60E-38	2.23E-41	1.82E-41	5.45E+01	2.09E-03	3.82E-02	
I-134	0.00E+00	0.00E+00	5.09E-36	8.11E-06	1.55E-09	3.98E-40	2.22E-41	4.80E-42	4.45E-01	1.02E-03	5.37E-03	
I-135	0.00E+00	0.00E+00	1.62E-35	1.65E-03	3.16E-07	6.26E-39	6.48E-41	1.03E-41	1.22E+01	3.06E-03	2.00E-02	
PARTICULATE												
I-131	0.00E+00	0.00E+00	6.03E-37	1.11E-04	2.13E-08	2.79E-39	5.03E-43	2.46E-43	6.05E+00	3.90E-05	5.33E-04	
I-132	0.00E+00	0.00E+00	4.75E-37	1.48E-05	2.84E-09	7.93E-41	2.56E-42	4.40E-43	1.27E-01	1.27E-04	7.07E-04	
I-133	0.00E+00	0.00E+00	1.14E-36	1.77E-04	3.39E-08	1.43E-39	1.23E-42	1.00E-42	3.99E+00	1.15E-04	2.10E-03	
I-134	0.00E+00	0.00E+00	2.80E-37	4.46E-07	8.53E-11	2.19E-41	1.22E-42	2.64E-43	2.45E-02	5.61E-05	2.95E-04	
I-135	0.00E+00	0.00E+00	8.89E-37	9.06E-05	1.73E-08	3.44E-40	3.56E-42	5.67E-43	6.69E-01	1.68E-04	1.10E-03	
ORGANIC												
I-131	0.00E+00	0.00E+00	4.82E-37	8.92E-05	1.71E-08	2.23E-39	4.02E-43	1.97E-43	4.84E+00	3.12E-05	4.27E-04	
I-132	0.00E+00	0.00E+00	3.80E-37	1.19E-05	2.27E-09	6.35E-41	2.05E-42	3.52E-43	1.02E-01	1.02E-04	5.66E-04	
I-133	0.00E+00	0.00E+00	9.14E-37	1.42E-04	2.71E-08	1.14E-39	9.81E-43	8.00E-43	2.40E+00	9.21E-05	1.68E-03	
I-134	0.00E+00	0.00E+00	2.24E-37	3.56E-07	6.82E-11	1.75E-41	9.77E-43	2.11E-43	1.96E-02	4.49E-05	2.36E-04	
I-135	0.00E+00	0.00E+00	7.11E-37	7.25E-05	1.39E-08	2.75E-40	2.85E-42	4.53E-43	5.35E-01	1.35E-04	8.81E-04	
NOBLE GASES												
XE-131M	0.00E+00	0.00E+00	8.65E-36	1.61E-03	3.08E-07	0.00E+00	4.28E-43	2.42E-42	0.00E+00	1.46E-04	5.25E-03	
XE-133M	0.00E+00	0.00E+00	5.73E-35	1.00E-02	1.92E-06	0.00E+00	4.25E-42	1.84E-41	0.00E+00	4.20E-04	3.95E-02	
XE-133	0.00E+00	0.00E+00	2.42E-33	4.42E-01	8.46E-05	0.00E+00	1.63E-40	7.30E-40	0.00E+00	4.00E-02	1.58E+00	
XE-135M	0.00E+00	0.00E+00	3.02E-36	6.94E-11	1.33E-14	0.00E+00	2.87E-42	6.07E-43	0.00E+00	5.68E-05	3.27E-04	
XE-135	0.00E+00	0.00E+00	6.90E-34	8.28E-02	1.59E-05	0.00E+00	3.82E-40	4.60E-40	0.00E+00	2.73E-02	9.20E-01	
XE-138	0.00E+00	0.00E+00	1.80E-35	2.32E-09	4.43E-13	0.00E+00	1.17E-40	2.99E-41	0.00E+00	6.45E-04	1.75E-02	
KR-83M	0.00E+00	0.00E+00	6.17E-35	1.27E-03	2.44E-07	0.00E+00	6.95E-43	4.35E-42	0.00E+00	5.75E-04	6.58E-03	
KR-85M	0.00E+00	0.00E+00	2.61E-34	1.92E-02	3.67E-06	0.00E+00	9.15E-41	1.26E-40	0.00E+00	6.45E-03	2.31E-01	
KR-85	0.00E+00	0.00E+00	1.64E-35	3.10E-03	5.92E-07	0.00E+00	7.74E-44	7.56E-42	0.00E+00	6.16E-06	1.65E-02	
KR-87	0.00E+00	0.00E+00	2.33E-34	1.67E-03	3.20E-07	0.00E+00	7.20E-40	5.06E-40	0.00E+00	1.69E-02	6.68E-01	
KR-88	0.00E+00	0.00E+00	6.18E-34	2.66E-02	5.09E-06	0.00E+00	2.42E-39	4.36E-40	0.00E+00	1.25E-01	7.35E-01	
							9.32E-38	4.09E-39	2.37E-39	1.97E+02	2.28E-01	4.32E+00

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO

SPRAYED VOL

AT 24.000 HOURS: X/Q(SITE)= .30E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .38E-05 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =

00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)			
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH	BODY	BETA	THYROID	WH	BODY
ELEMENTAL												
I-131	0.00E+00	0.00E+00	0.00E+00	5.29E-09	1.01E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.93E-01	5.76E-06	7.88E-05
I-132	0.00E+00	0.00E+00	0.00E+00	6.00E-12	1.15E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-03	3.13E-06	1.74E-05
I-133	0.00E+00	0.00E+00	0.00E+00	5.25E-09	1.01E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.70E-01	1.42E-05	2.60E-04
I-134	0.00E+00	0.00E+00	0.00E+00	6.26E-17	1.20E-20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.03E-05	6.95E-08	3.66E-07
I-135	0.00E+00	0.00E+00	0.00E+00	8.71E-10	1.67E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.41E-02	1.36E-05	8.91E-05
PARTICULATE												
I-131	0.00E+00	0.00E+00	0.00E+00	2.91E-10	5.56E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.91E-02	3.16E-07	4.33E-06
I-132	0.00E+00	0.00E+00	0.00E+00	3.30E-13	6.31E-17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-04	1.72E-07	9.56E-07
I-133	0.00E+00	0.00E+00	0.00E+00	2.89E-10	5.52E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-02	7.82E-07	1.43E-05
I-134	0.00E+00	0.00E+00	0.00E+00	3.44E-18	6.58E-22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.67E-06	3.82E-09	2.01E-08
I-135	0.00E+00	0.00E+00	0.00E+00	4.79E-11	9.16E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.97E-03	7.48E-07	4.90E-06
ORGANIC												
I-131	0.00E+00	0.00E+00	0.00E+00	2.32E-10	4.45E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-02	2.53E-07	3.46E-06
I-132	0.00E+00	0.00E+00	0.00E+00	2.64E-13	5.05E-17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-04	1.37E-07	7.64E-07
I-133	0.00E+00	0.00E+00	0.00E+00	2.31E-10	4.42E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-02	6.26E-07	1.14E-05
I-134	0.00E+00	0.00E+00	0.00E+00	2.75E-18	5.27E-22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-06	3.06E-09	1.61E-08
I-135	0.00E+00	0.00E+00	0.00E+00	3.83E-11	7.33E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.38E-03	5.98E-07	3.92E-06
NOBLE GASES												
XE-131M	0.00E+00	0.00E+00	0.00E+00	4.28E-09	8.19E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E-06	4.30E-05
XE-133M	0.00E+00	0.00E+00	0.00E+00	2.26E-08	4.32E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E-06	3.03E-04
XE-133	0.00E+00	0.00E+00	0.00E+00	1.12E-06	2.14E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.21E-04	1.27E-02
XE-135M	0.00E+00	0.00E+00	0.00E+00	5.90E-35	1.13E-38	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.34E-14	3.08E-13
XE-135	0.00E+00	0.00E+00	0.00E+00	6.78E-08	1.30E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-04	4.82E-03
XE-138	0.00E+00	0.00E+00	0.00E+00	1.98E-31	3.78E-35	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.42E-12	9.25E-11
KR-83M	0.00E+00	0.00E+00	0.00E+00	9.31E-12	1.78E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.12E-07	5.86E-06
KR-85M	0.00E+00	0.00E+00	0.00E+00	4.25E-09	8.14E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.07E-05	7.40E-04
KR-85	0.00E+00	0.00E+00	0.00E+00	8.54E-09	1.64E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.12E-08	1.37E-04

KR-87	0.00E+00	0.00E+00	0.00E+00	7.27E-13	1.39E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.23E-06	2.06E-04
KR-88	0.00E+00	0.00E+00	0.00E+00	1.39E-09	2.67E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-04	1.37E-03
						0.00E+00	0.00E+00	0.00E+00	1.45E+00	7.69E-04	2.08E-02

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 720.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM = 00.00

ISOTOPE	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS			CONTROL ROOM DOSES (REM)		
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER	THYROID	WH BODY	BETA	
ELEMENTAL	.000	.000	.000	.000	1.000	1.000				
PARTICULATE	.000	.000	.000	.000	1.000	1.000				
ORGANIC	.000	.000	.000	.000	1.000	1.000				
	ACTIVITY (CURIES)	CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)		CONTROL ROOM DOSES (REM)				
	PRIMARY SECONDARY RELEASE			THYROID WH BODY	BETA	THYROID	WH BODY	BETA		
ELEMENTAL										
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-06 1.50E-11 2.05E-10	
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.97E-11 6.96E-14 3.87E-13	
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.03E-07 2.32E-11 4.23E-10	
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E-16 5.37E-19 2.82E-18	
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.86E-08 7.19E-12 4.71E-11	
PARTICULATE										
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.28E-07 8.25E-13 1.13E-11	
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.83E-12 3.82E-15 2.13E-14	
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-08 1.27E-12 2.32E-11	
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-17 2.95E-20 1.55E-19	
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.57E-09 3.95E-13 2.59E-12	
ORGANIC										
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.02E-07 6.60E-13 9.03E-12	
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.06E-12 3.06E-15 1.70E-14	
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.65E-08 1.02E-12 1.86E-11	
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-17 2.36E-20 1.24E-19	
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-09 3.16E-13 2.07E-12	
NOBLE GASES										
XE-131M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00 3.16E-12 1.14E-10	
XE-133M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00 7.26E-12 6.82E-10	
XE-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00 8.12E-10 3.21E-08	
XE-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00 4.54E-38 2.62E-37	
XE-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00 1.17E-10 3.95E-09	
XE-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00 2.91E-34 7.89E-33	
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00 3.75E-15 4.29E-14	
KR-85M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00 4.58E-12 1.64E-10	
KR-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00 1.41E-13 3.77E-10	
KR-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00 2.28E-15 8.98E-14	
KR-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00 1.22E-11 7.19E-11	
					0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-06 1.01E-09 3.82E-08	
					=====	=====	=====	=====	=====	
					TOTAL DOSES 0-30 DAYS	4.96E+01	1.08E+01	3.73E+00	1.04E+03 2.18E+00 4.17E+01	

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 30 d

ISOTOPE	ACTIVITY RELEASED (CURIES)			
	2. HRS	8. HRS	24. HRS	720. HRS
ELEMENTAL				
I-131	1.54E+03	1.10E-35	0.00E+00	0.00E+00
I-132	2.21E+03	8.64E-36	0.00E+00	0.00E+00
I-133	3.09E+03	2.08E-35	0.00E+00	0.00E+00
I-134	3.55E+03	5.09E-36	0.00E+00	0.00E+00
I-135	2.77E+03	1.62E-35	0.00E+00	0.00E+00
PARTICULATE				
I-131	8.45E+01	6.03E-37	0.00E+00	0.00E+00
I-132	1.21E+02	4.75E-37	0.00E+00	0.00E+00
I-133	1.70E+02	1.14E-36	0.00E+00	0.00E+00
I-134	1.95E+02	2.80E-37	0.00E+00	0.00E+00
I-135	1.52E+02	8.89E-37	0.00E+00	0.00E+00
ORGANIC				
I-131	6.76E+01	4.82E-37	0.00E+00	0.00E+00
I-132	9.71E+01	3.80E-37	0.00E+00	0.00E+00

I-133	1.36E+02	9.14E-37	0.00E+00	0.00E+00	1.36E+02
I-134	1.56E+02	2.24E-37	0.00E+00	0.00E+00	1.56E+02
I-135	1.22E+02	7.11E-37	0.00E+00	0.00E+00	1.22E+02
NOBLE GASES					
XE-131M	1.21E+03	8.65E-36	0.00E+00	0.00E+00	1.21E+03
XE-133M	8.18E+03	5.73E-35	0.00E+00	0.00E+00	8.18E+03
XE-133	3.40E+05	2.42E-33	0.00E+00	0.00E+00	3.40E+05
XE-135M	9.06E+04	3.02E-36	0.00E+00	0.00E+00	9.06E+04
XE-135	1.12E+05	6.90E-34	0.00E+00	0.00E+00	1.12E+05
XE-138	3.02E+05	1.80E-35	0.00E+00	0.00E+00	3.02E+05
KR-83M	1.82E+04	6.17E-35	0.00E+00	0.00E+00	1.82E+04
KR-85M	4.98E+04	2.61E-34	0.00E+00	0.00E+00	4.98E+04
KR-85	2.28E+03	1.64E-35	0.00E+00	0.00E+00	2.28E+03
KR-87	9.76E+04	2.33E-34	0.00E+00	0.00E+00	9.76E+04
KR-88	1.42E+05	6.18E-34	0.00E+00	0.00E+00	1.42E+05

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 17:19:18.94

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 17:19:12.51

1 QDC CRDA, EAB, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s
 2 2 1 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 7200
 6 0.2402 0.
 7 9.058E-4 0.
 8 2*1.
 9 2*0.
 10 2.9E-4 0.
 11 2*0.
 12 2*0.
 13 2*0.
 14 2*0.
 15 2*0.
 16 2*0.
 17 2*0.
 18 2*0.
 19 2*0.
 20 2*0.
 21 6*1.
 22 3*1.
 23 6.76E+3 9.73E+3 1.36E+4 1.57E+4 1.22E+4 1.21E+3 8.18E+3 3.40E+5
 24 9.21E+4 1.12E+5 3.07E+5 1.82E+4 4.99E+4 2.28E+3 9.80E+4 1.42E+5

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QDC CRDA, EAB, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	6.760E+03
I-132	9.730E+03
I-133	1.360E+04
I-134	1.570E+04
I-135	1.220E+04
XE-131M	1.210E+03
XE-133M	8.180E+03
XE-133	3.400E+05
XE-135M	9.210E+04
XE-135	1.120E+05
XE-138	3.070E+05
KR-83M	1.820E+04
KR-85M	4.990E+04
KR-85	2.280E+03
KR-87	9.800E+04
KR-88	1.420E+05

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QDC CRDA, EAB, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0 CFM
 X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .78E+02 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)				
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH	BODY	BETA	THYROID	WH	BODY	BETA
ELEMENTAL													
I-131	3.64E+02	1.17E+03	3.92E+00	0.00E+00	0.00E+00	5.84E-01	1.06E-04	5.16E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	5.24E+02	1.68E+03	5.65E+00	0.00E+00	0.00E+00	3.04E-02	9.82E-04	1.69E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	7.32E+02	2.35E+03	7.89E+00	0.00E+00	0.00E+00	3.18E-01	2.73E-04	2.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	8.44E+02	2.71E+03	9.10E+00	0.00E+00	0.00E+00	2.29E-02	1.28E-03	2.76E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL DOSES 0-30 DAYS ===== ===== ===== ===== ===== =====
 1.15E+00 2.53E-01 8.69E-02 0.00E+00 0.00E+00 0.00E+00 0.00E+00

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QDC CRDA, EAB, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

ISOTOPE	ACTIVITY RELEASED (CURIES)	
	2. HRS	
ELEMENTAL		
I-131	3.92E+00	3.92E+00
I-132	5.65E+00	5.65E+00
I-133	7.89E+00	7.89E+00
I-134	9.10E+00	9.10E+00
I-135	7.08E+00	7.08E+00
PARTICULATE		
I-131	2.16E-01	2.16E-01
I-132	3.10E-01	3.10E-01
I-133	4.34E-01	4.34E-01
I-134	5.00E-01	5.00E-01
I-135	3.89E-01	3.89E-01
ORGANIC		
I-131	1.72E-01	1.72E-01
I-132	2.48E-01	2.48E-01
I-133	3.47E-01	3.47E-01
I-134	4.00E-01	4.00E-01
I-135	3.11E-01	3.11E-01
NOBLE GASES		
XE-131M	3.09E+00	3.09E+00
XE-133M	2.09E+01	2.09E+01
XE-133	8.67E+02	8.67E+02
XE-135M	2.34E+02	2.34E+02
XE-135	2.86E+02	2.86E+02
XE-138	7.81E+02	7.81E+02
KR-83M	4.64E+01	4.64E+01
KR-85M	1.27E+02	1.27E+02
KR-85	5.82E+00	5.82E+00
KR-87	2.50E+02	2.50E+02
KR-88	3.62E+02	3.62E+02

END EXECUTION DATE: 11/18/1999
 END EXECUTION TIME: 17:19:12.51

AXIDENT VER 2 MOD 4
PRODUCTION DATE 02/18/92
BEGIN EXECUTION DATE: 11/18/1999
BEGIN EXECUTION TIME: 17:19:12.51

1 QDC CRDA, EAB, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s
2 2 1 1. 1.
3 -2561 2.60+6 1.845+5 5.83+4
4 0. 0. 0. 1. 1. 2.78+5 0.
5 6 7200
6 0.2402 0.
7 9.058E-4 0.
8 2*1.
9 2*0.
10 2.9E-4 0.
11 2*0.
12 2*0.
13 2*0.
14 2*0.
15 2*0.
16 2*0.
17 2*0.
18 2*0.
19 2*0.
20 2*0.
21 6*1.
22 3*1.
23 6.76E+3 9.73E+3 1.36E+4 1.57E+4 1.22E+4 1.21E+3 8.18E+3 3.40E+5
24 9.21E+4 1.12E+5 3.07E+5 1.82E+4 4.99E+4 2.28E+3 9.80E+4 1.42E+5

1

QDC CRDA, EAB, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

INITIAL CONTAINMENT INVENTORY

ISOTOPE ACTIVITY (CURIES)

I-131 6.760E+03
I-132 9.730E+03
I-133 1.360E+04
I-134 1.570E+04
I-135 1.220E+04
XE-131M 1.210E+03
XE-133M 8.180E+03
XE-133 3.400E+05
XE-135M 9.210E+04
XE-135 1.120E+05
XE-138 3.070E+05
KR-83M 1.820E+04
KR-85M 4.990E+04
KR-85 2.280E+03
KR-87 9.800E+04
KR-88 1.420E+05

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QDC CRDA, EAB, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0 CFM
X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .78E+02 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Rows include ELEMENTAL, PARTICULATE, ORGANIC with sub-columns for SPRAY, PRIMARY, SECONDARY, CONT CENTER, RELEASE, and CONT CENTER.

Table with columns: ACTIVITY (CURIES), CONTROL ROOM (CURIES) (UCI/CM3), SITE BOUNDARY DOSES (REM) THYROID WH BODY BETA, CONTROL ROOM DOSES (REM) THYROID WH BODY BETA. Rows include ISOTOPE (I-131, I-132, I-133, I-134) and ELEMENTAL.

TOTAL DOSES 0-30 DAYS ===== ===== ===== ===== ===== =====
 1.15E+00 2.53E-01 8.69E-02 0.00E+00 0.00E+00 0.00E+00

1

QDC CRDA, EAB, ALL REL MVP: SIEMENS 20 GWD/MTU: 0 - 6 s

ISOTOPE	2. HRS	ACTIVITY RELEASED (CURIES)
ELEMENTAL		
I-131	3.92E+00	3.92E+00
I-132	5.65E+00	5.65E+00
I-133	7.89E+00	7.89E+00
I-134	9.10E+00	9.10E+00
I-135	7.08E+00	7.08E+00
PARTICULATE		
I-131	2.16E-01	2.16E-01
I-132	3.10E-01	3.10E-01
I-133	4.34E-01	4.34E-01
I-134	5.00E-01	5.00E-01
I-135	3.89E-01	3.89E-01
ORGANIC		
I-131	1.72E-01	1.72E-01
I-132	2.48E-01	2.48E-01
I-133	3.47E-01	3.47E-01
I-134	4.00E-01	4.00E-01
I-135	3.11E-01	3.11E-01
NOBLE GASES		
XE-131M	3.09E+00	3.09E+00
XE-133M	2.09E+01	2.09E+01
XE-133	8.67E+02	8.67E+02
XE-135M	2.34E+02	2.34E+02
XE-135	2.86E+02	2.86E+02
XE-138	7.81E+02	7.81E+02
KR-83M	4.64E+01	4.64E+01
KR-85M	1.27E+02	1.27E+02
KR-85	5.82E+00	5.82E+00
KR-87	2.50E+02	2.50E+02
KR-88	3.62E+02	3.62E+02

END EXECUTION DATE: 11/18/1999
 END EXECUTION TIME: 17:19:12.51

1

QDC CRDA, EAB, ALL REL AOG: SIEMENS 20 GWD/MTU: 6 s - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 2.000 HOURS: X/Q(SITE)= .23E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0 CFM
X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .10E+01 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Rows include ELEMENTAL, PARTICULATE, and ORGANIC with sub-columns for SPRAY, PRIMARY, SECONDARY, CONT CENTER, RELEASE, and CONT CENTER.

Table with columns: ISOTOPE, ACTIVITY (CURIES), CONTROL ROOM DOSES (REM), and SITE BOUNDARY DOSES (REM). Rows include ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES with various isotope labels like I-131, I-132, etc.

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QDC CRDA, EAB, ALL REL AOG: SIEMENS 20 GWD/MTU: 6 s - 2 h

Table with columns: ISOTOPE and ACTIVITY RELEASED (CURIES). Rows include ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES with isotope labels and activity values.

XE-133M	6.63E+02	6.63E+02
XE-133	2.77E+04	2.77E+04
XE-135M	1.62E+03	1.62E+03
XE-135	8.55E+03	8.55E+03
XE-138	5.93E+03	5.93E+03
KR-83M	1.07E+03	1.07E+03
KR-85M	3.53E+03	3.53E+03
KR-85	1.87E+02	1.87E+02
KR-87	5.01E+03	5.01E+03
KR-88	9.28E+03	9.28E+03

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 17:19:05.04

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 17:19:37.17

1 QDC CRDA, EAB, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 2 h
 2 3 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 1800 7200
 6 0.2402 2*1.201E-2
 7 3*1.
 8 3*1.
 9 3*0.
 10 2*2.9e-4 2.3E-5
 11 3*0.
 12 3*0.
 13 3*0.
 14 3*0.
 15 3*0.
 16 3*0.
 17 3*0.
 18 3*0.
 19 3*0.
 20 3*0.
 21 6*1.
 22 3*1.
 23 6.76E+3 9.73E+3 1.36E+4 1.57E+4 1.22E+4 1.21E+3 8.18E+3 3.40E+5
 24 9.21E+4 1.12E+5 3.07E+5 1.82E+4 4.99E+4 2.28E+3 9.80E+4 1.42E+5

1

QDC CRDA, EAB, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 2 h

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	6.760E+03
I-132	9.730E+03
I-133	1.360E+04
I-134	1.570E+04
I-135	1.220E+04
XE-131M	1.210E+03
XE-133M	8.180E+03
XE-133	3.400E+05
XE-135M	9.210E+04
XE-135	1.120E+05
XE-138	3.070E+05
KR-83M	1.820E+04
KR-85M	4.990E+04
KR-85	2.280E+03
KR-87	9.800E+04
KR-88	1.420E+05

1

QDC CRDA, EAB, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE) = .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0 CFM
 X/Q CONT ROOM = .00E+00 SEC/M3 SEC RELEASE RATE = .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	3.64E+02	1.14E+02	1.06E+03	0.00E+00	0.00E+00	1.58E+02	2.85E-02	1.39E-02	0.00E+00	0.00E+00	0.00E+00
I-132	5.24E+02	1.64E+02	1.53E+03	0.00E+00	0.00E+00	8.21E+00	2.65E-01	4.56E-02	0.00E+00	0.00E+00	0.00E+00
I-133	7.32E+02	2.29E+02	2.13E+03	0.00E+00	0.00E+00	8.58E+01	7.38E-02	6.02E-02	0.00E+00	0.00E+00	0.00E+00
I-134	8.44E+02	2.64E+02	2.46E+03	0.00E+00	0.00E+00	6.19E+00	3.46E-01	7.47E-02	0.00E+00	0.00E+00	0.00E+00

I-135	6.57E+02	2.05E+02	1.91E+03	0.00E+00	0.00E+00	2.39E+01	2.47E-01	3.93E-02	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	2.00E+01	6.26E+00	5.82E+01	0.00E+00	0.00E+00	8.68E+00	1.57E-03	7.65E-04	0.00E+00	0.00E+00	0.00E+00
I-132	2.88E+01	9.00E+00	8.38E+01	0.00E+00	0.00E+00	4.51E-01	1.46E-02	2.50E-03	0.00E+00	0.00E+00	0.00E+00
I-133	4.02E+01	1.26E+01	1.17E+02	0.00E+00	0.00E+00	4.72E+00	4.05E-03	3.31E-03	0.00E+00	0.00E+00	0.00E+00
I-134	4.64E+01	1.45E+01	1.35E+02	0.00E+00	0.00E+00	3.40E-01	1.90E-02	4.10E-03	0.00E+00	0.00E+00	0.00E+00
I-135	3.61E+01	1.13E+01	1.05E+02	0.00E+00	0.00E+00	1.31E+00	1.36E-02	2.16E-03	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	1.60E+01	5.00E+00	4.66E+01	0.00E+00	0.00E+00	6.94E+00	1.25E-03	6.12E-04	0.00E+00	0.00E+00	0.00E+00
I-132	2.30E+01	7.20E+00	6.71E+01	0.00E+00	0.00E+00	3.61E-01	1.17E-02	2.00E-03	0.00E+00	0.00E+00	0.00E+00
I-133	3.22E+01	1.01E+01	9.37E+01	0.00E+00	0.00E+00	3.77E+00	3.24E-03	2.64E-03	0.00E+00	0.00E+00	0.00E+00
I-134	3.71E+01	1.16E+01	1.08E+02	0.00E+00	0.00E+00	2.72E-01	1.52E-02	3.28E-03	0.00E+00	0.00E+00	0.00E+00
I-135	2.89E+01	9.03E+00	8.41E+01	0.00E+00	0.00E+00	1.05E+00	1.08E-02	1.73E-03	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	2.86E+02	8.96E+01	8.34E+02	0.00E+00	0.00E+00	0.00E+00	1.33E-03	7.51E-03	0.00E+00	0.00E+00	0.00E+00
XE-133M	1.94E+03	6.06E+02	5.64E+03	0.00E+00	0.00E+00	0.00E+00	1.35E-02	5.83E-02	0.00E+00	0.00E+00	0.00E+00
XE-133	8.05E+04	2.52E+04	2.34E+05	0.00E+00	0.00E+00	0.00E+00	5.10E-01	2.28E+00	0.00E+00	0.00E+00	0.00E+00
XE-135M	2.17E+04	6.79E+03	6.34E+04	0.00E+00	0.00E+00	0.00E+00	1.94E+00	4.10E-01	0.00E+00	0.00E+00	0.00E+00
XE-135	2.65E+04	8.29E+03	7.72E+04	0.00E+00	0.00E+00	0.00E+00	1.38E+00	1.66E+00	0.00E+00	0.00E+00	0.00E+00
XE-138	7.24E+04	2.26E+04	2.11E+05	0.00E+00	0.00E+00	0.00E+00	4.39E+01	1.13E+01	0.00E+00	0.00E+00	0.00E+00
KR-83M	4.30E+03	1.35E+03	1.25E+04	0.00E+00	0.00E+00	0.00E+00	4.55E-03	2.84E-02	0.00E+00	0.00E+00	0.00E+00
KR-85M	1.18E+04	3.69E+03	3.44E+04	0.00E+00	0.00E+00	0.00E+00	3.89E-01	5.35E-01	0.00E+00	0.00E+00	0.00E+00
KR-85	5.40E+02	1.69E+02	1.57E+03	0.00E+00	0.00E+00	0.00E+00	2.39E-04	2.34E-02	0.00E+00	0.00E+00	0.00E+00
KR-87	2.32E+04	7.25E+03	6.75E+04	0.00E+00	0.00E+00	0.00E+00	6.73E+00	4.73E+00	0.00E+00	0.00E+00	0.00E+00
KR-88	3.36E+04	1.05E+04	9.79E+04	0.00E+00	0.00E+00	0.00E+00	1.24E+01	2.23E+00	0.00E+00	0.00E+00	0.00E+00
						3.10E+02	6.83E+01	2.35E+01	0.00E+00	0.00E+00	0.00E+00

1 QDC CRDA, EAB, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .500 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	1.60E-07	1.94E-09	4.78E+02	0.00E+00	0.00E+00	7.12E+01	1.29E-02	6.28E-03	0.00E+00	0.00E+00	0.00E+00
I-132	1.98E-07	2.41E-09	6.84E+02	0.00E+00	0.00E+00	3.68E+00	1.19E-01	2.04E-02	0.00E+00	0.00E+00	0.00E+00
I-133	3.16E-07	3.85E-09	9.61E+02	0.00E+00	0.00E+00	3.87E+01	3.32E-02	2.71E-02	0.00E+00	0.00E+00	0.00E+00
I-134	2.49E-07	3.03E-09	1.09E+03	0.00E+00	0.00E+00	2.75E+01	1.54E-01	3.32E-02	0.00E+00	0.00E+00	0.00E+00
I-135	2.74E-07	3.33E-09	8.61E+02	0.00E+00	0.00E+00	1.07E+01	1.11E-01	1.77E-02	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	8.77E-09	1.07E-10	2.62E+01	0.00E+00	0.00E+00	3.91E+00	7.06E-04	3.45E-04	0.00E+00	0.00E+00	0.00E+00
I-132	1.09E-08	1.32E-10	3.76E+01	0.00E+00	0.00E+00	2.02E-01	6.54E-03	1.12E-03	0.00E+00	0.00E+00	0.00E+00
I-133	1.74E-08	2.11E-10	5.28E+01	0.00E+00	0.00E+00	2.12E+00	1.83E-03	1.49E-03	0.00E+00	0.00E+00	0.00E+00
I-134	1.37E-08	1.66E-10	6.00E+01	0.00E+00	0.00E+00	1.51E-01	8.44E-03	1.82E-03	0.00E+00	0.00E+00	0.00E+00
I-135	1.51E-08	1.83E-10	4.73E+01	0.00E+00	0.00E+00	5.90E-01	6.10E-03	9.71E-04	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	7.01E-09	8.53E-11	2.10E+01	0.00E+00	0.00E+00	3.13E+00	5.65E-04	2.76E-04	0.00E+00	0.00E+00	0.00E+00
I-132	8.70E-09	1.06E-10	3.01E+01	0.00E+00	0.00E+00	1.62E-01	5.23E-03	8.98E-04	0.00E+00	0.00E+00	0.00E+00
I-133	1.39E-08	1.69E-10	4.22E+01	0.00E+00	0.00E+00	1.70E+00	1.46E-03	1.19E-03	0.00E+00	0.00E+00	0.00E+00
I-134	1.09E-08	1.33E-10	4.80E+01	0.00E+00	0.00E+00	1.21E-01	6.75E-03	1.46E-03	0.00E+00	0.00E+00	0.00E+00
I-135	1.20E-08	1.46E-10	3.78E+01	0.00E+00	0.00E+00	4.72E-01	4.88E-03	7.77E-04	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	1.26E-07	1.53E-09	3.76E+02	0.00E+00	0.00E+00	0.00E+00	6.00E-04	3.38E-03	0.00E+00	0.00E+00	0.00E+00
XE-133M	8.45E-07	1.03E-08	2.54E+03	0.00E+00	0.00E+00	0.00E+00	6.08E-03	2.63E-02	0.00E+00	0.00E+00	0.00E+00
XE-133	3.52E-05	4.28E-07	1.06E+05	0.00E+00	0.00E+00	0.00E+00	2.30E-01	1.03E+00	0.00E+00	0.00E+00	0.00E+00
XE-135M	2.53E-06	3.07E-08	2.72E+04	0.00E+00	0.00E+00	0.00E+00	8.32E-01	1.76E-01	0.00E+00	0.00E+00	0.00E+00
XE-135	1.12E-05	1.36E-07	3.47E+04	0.00E+00	0.00E+00	0.00E+00	6.20E-01	7.46E-01	0.00E+00	0.00E+00	0.00E+00
XE-138	9.73E-06	1.18E-07	9.12E+04	0.00E+00	0.00E+00	0.00E+00	1.90E+01	4.86E+00	0.00E+00	0.00E+00	0.00E+00
KR-83M	1.57E-06	1.91E-08	5.61E+03	0.00E+00	0.00E+00	0.00E+00	2.03E-03	1.27E-02	0.00E+00	0.00E+00	0.00E+00
KR-85M	4.79E-06	5.83E-08	1.55E+04	0.00E+00	0.00E+00	0.00E+00	1.75E-01	2.40E-01	0.00E+00	0.00E+00	0.00E+00
KR-85	2.37E-07	2.88E-09	7.08E+02	0.00E+00	0.00E+00	0.00E+00	1.08E-04	1.05E-02	0.00E+00	0.00E+00	0.00E+00
KR-87	7.75E-06	9.42E-08	3.01E+04	0.00E+00	0.00E+00	0.00E+00	3.00E+00	2.11E+00	0.00E+00	0.00E+00	0.00E+00
KR-88	1.30E-05	1.59E-07	4.39E+04	0.00E+00	0.00E+00	0.00E+00	5.55E+00	9.99E-01	0.00E+00	0.00E+00	0.00E+00
						1.40E+02	2.99E+01	1.03E+01	0.00E+00	0.00E+00	0.00E+00

1 QDC CRDA, EAB, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 2.000 HOURS: X/Q(SITE)= .23E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=.0 CFM
X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Rows include ELEMENTAL, PARTICULATE, and ORGANIC with sub-columns for SPRAY, PRIMARY, SECONDARY, CONT CENTER, and RELEASE.

Table with columns: ACTIVITY (CURIES), CONTROL ROOM DOSES (REM), and SITE BOUNDARY DOSES (REM). Rows include ISOTOPE, ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES with various sub-columns for activity and dose measurements.

1 QDC CRDA, EAB, ALL REL GLAND: SIEMENS 20 GWD/MTU: 0 - 2 h

Table with columns: ISOTOPE, 2. HRS, and ACTIVITY RELEASED (CURIES). Rows include ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES.

XE-133M	8.18E+03	8.18E+03
XE-133	3.40E+05	3.40E+05
XE-135M	9.06E+04	9.06E+04
XE-135	1.12E+05	1.12E+05
XE-138	3.02E+05	3.02E+05
KR-83M	1.82E+04	1.82E+04
KR-85M	4.98E+04	4.98E+04
KR-85	2.28E+03	2.28E+03
KR-87	9.76E+04	9.76E+04
KR-88	1.42E+05	1.42E+05

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 17:19:37.23

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 17:45:17.01

1 QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s
 2 2 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 2.592E6
 6 0.2402 0.
 7 9.058E-4 0.
 8 2*1.
 9 2*2460
 10 3.2E-5 0.
 11 7.00E-4 0.
 12 2*0.
 13 2*0.
 14 2*0.
 15 2*0.
 16 2*0.
 17 2*0.
 18 2*0.
 19 2*0.
 20 2*0.
 21 6*1.
 22 3*1.
 23 7.43E+3 1.04E+4 1.32E+4 1.48E+4 1.16E+4 1.57E+3 8.14E+3 3.33E+5
 24 8.89E+4 8.25E+4 3.17E+5 8.39E+3 3.21E+4 4.57E+3 6.03E+4 8.93E+4

1

QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	7.430E+03
I-132	1.040E+04
I-133	1.320E+04
I-134	1.480E+04
I-135	1.160E+04
XE-131M	1.570E+03
XE-133M	8.140E+03
XE-133	3.330E+05
XE-135M	8.890E+04
XE-135	8.250E+04
XE-138	3.170E+05
KR-83M	8.390E+03
KR-85M	3.210E+04
KR-85	4.570E+03
KR-87	6.030E+04
KR-88	8.930E+04

1

QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .78E+02 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH BODY	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	4.00E+02	1.29E+03	4.31E+00	3.50E-03	6.70E-07	7.09E-02	1.28E-05	6.25E-06	7.63E-04	4.92E-09	6.73E-08
I-132	5.60E+02	1.80E+03	6.03E+00	4.90E-03	9.38E-07	3.58E-03	1.16E-04	1.99E-05	3.86E-05	3.85E-08	2.14E-07
I-133	7.11E+02	2.28E+03	7.66E+00	6.22E-03	1.19E-06	3.40E-02	2.92E-05	2.38E-05	3.66E-04	1.41E-08	2.57E-07
I-134	7.96E+02	2.56E+03	8.58E+00	6.97E-03	1.33E-06	2.38E-03	1.33E-04	2.87E-05	2.57E-05	5.89E-08	3.10E-07

I-135	6.24E+02	2.01E+03	6.73E+00	5.47E-03	1.05E-06	9.27E-03	9.58E-05	1.53E-05	9.98E-05	2.51E-08	1.64E-07
PARTICULATE											
I-131	2.20E+01	7.07E+01	2.37E-01	1.92E-04	3.68E-08	3.89E-03	7.03E-07	3.44E-07	4.19E-05	2.70E-10	3.70E-09
I-132	3.07E+01	9.89E+01	3.32E-01	2.69E-04	5.15E-08	1.97E-04	6.37E-06	1.09E-06	2.12E-06	2.12E-09	1.18E-08
I-133	3.90E+01	1.26E+02	4.21E-01	3.42E-04	6.54E-08	1.87E-03	1.61E-06	1.31E-06	2.01E-05	7.74E-10	1.41E-08
I-134	4.37E+01	1.41E+02	4.72E-01	3.83E-04	7.33E-08	1.31E-04	7.31E-06	1.58E-06	1.41E-06	3.23E-09	1.70E-08
I-135	3.43E+01	1.10E+02	3.70E-01	3.00E-04	5.75E-08	5.09E-04	5.26E-06	8.38E-07	5.49E-06	1.38E-09	9.03E-09
ORGANIC											
I-131	1.76E+01	5.65E+01	1.90E-01	1.54E-04	2.95E-08	3.11E-03	5.63E-07	2.75E-07	3.36E-05	2.16E-10	2.96E-09
I-132	2.46E+01	7.91E+01	2.65E-01	2.15E-04	4.12E-08	1.58E-04	5.09E-06	8.75E-07	1.70E-06	1.69E-09	9.42E-09
I-133	3.12E+01	1.00E+02	3.37E-01	2.74E-04	5.24E-08	1.50E-03	1.28E-06	1.05E-06	1.61E-05	6.19E-10	1.13E-08
I-134	3.50E+01	1.12E+02	3.77E-01	3.06E-04	5.86E-08	1.05E-04	5.85E-06	1.26E-06	1.13E-06	2.59E-09	1.36E-08
I-135	2.74E+01	8.82E+01	2.96E-01	2.40E-04	4.60E-08	4.07E-04	4.21E-06	6.71E-07	4.39E-06	1.10E-09	7.22E-09
NOBLE GASES											
XE-131M	3.72E+02	1.19E+03	4.01E+00	3.25E-03	6.23E-07	0.00E+00	7.05E-07	3.98E-06	0.00E+00	1.19E-09	4.29E-08
XE-133M	1.93E+03	6.19E+03	2.08E+01	1.69E-02	3.23E-06	0.00E+00	5.48E-06	2.37E-05	0.00E+00	2.72E-09	2.55E-07
XE-133	7.88E+04	2.53E+05	8.49E+02	6.90E-01	1.32E-04	0.00E+00	2.04E-04	9.13E-04	0.00E+00	2.49E-07	9.83E-06
XE-135M	2.09E+04	6.73E+04	2.26E+02	1.83E-01	3.51E-05	0.00E+00	7.63E-04	1.61E-04	0.00E+00	3.02E-07	1.74E-06
XE-135	1.95E+04	6.28E+04	2.10E+02	1.71E-01	3.27E-05	0.00E+00	4.14E-04	4.99E-04	0.00E+00	1.59E-07	5.37E-06
XE-138	7.47E+04	2.40E+05	8.07E+02	6.54E-01	1.25E-04	0.00E+00	1.85E-02	4.75E-03	0.00E+00	5.04E-09	5.77E-08
KR-83M	1.98E+03	6.38E+03	2.14E+01	1.74E-02	3.33E-06	0.00E+00	8.56E-07	5.35E-06	0.00E+00	5.04E-09	5.77E-08
KR-85M	7.59E+03	2.44E+04	8.19E+01	6.65E-02	1.27E-05	0.00E+00	1.02E-04	1.40E-04	0.00E+00	4.23E-08	1.51E-06
KR-85	1.08E+03	3.48E+03	1.17E+01	9.47E-03	1.81E-06	0.00E+00	1.96E-07	1.91E-05	0.00E+00	7.71E-11	2.06E-07
KR-87	1.43E+04	4.58E+04	1.54E+02	1.25E-01	2.39E-05	0.00E+00	1.69E-03	1.19E-03	0.00E+00	3.25E-07	1.28E-05
KR-88	2.11E+04	6.79E+04	2.28E+02	1.85E-01	3.54E-05	0.00E+00	3.18E-03	5.72E-04	0.00E+00	1.05E-06	6.16E-06
						1.32E-01	2.53E-02	8.38E-03	1.42E-03	4.18E-06	9.02E-05

1 QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CPM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 720.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA		
ELEMENTAL											
I-131	3.02E+01	9.70E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E+00	9.94E-06	1.36E-04
I-132	3.37E-92	1.08E-91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.69E-02	5.68E-05	3.16E-04
I-133	3.38E-08	1.09E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.14E-01	2.75E-05	5.01E-04
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-02	5.98E-05	3.14E-04
I-135	3.08E-30	9.89E-30	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-01	4.51E-05	2.95E-04
PARTICULATE											
I-131	1.66E+00	5.33E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.48E-02	5.46E-07	7.48E-06
I-132	1.85E-93	5.95E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-03	3.12E-06	1.74E-05
I-133	1.86E-09	5.97E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.93E-02	1.51E-06	2.75E-05
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-03	3.28E-06	1.73E-05
I-135	1.69E-31	5.44E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.86E-03	2.48E-06	1.62E-05
ORGANIC											
I-131	1.33E+00	4.27E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.78E-02	4.37E-07	5.98E-06
I-132	1.48E-93	4.76E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.50E-03	2.50E-06	1.39E-05
I-133	1.49E-09	4.78E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E-02	1.21E-06	2.20E-05
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.14E-03	2.63E-06	1.38E-05
I-135	1.35E-31	4.35E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.89E-03	1.98E-06	1.30E-05
NOBLE GASES											
XE-131M	6.39E+01	2.06E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-06	8.67E-05
XE-133M	1.94E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.43E-06	5.10E-04	
XE-133	1.53E+03	4.93E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E-04	1.98E-02
XE-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-04	8.14E-04
XE-135	3.46E-20	1.11E-19	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-04	9.96E-03
XE-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.65E-04	2.61E-02
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.99E-06	8.00E-05
KR-85M	3.76E-46	1.21E-45	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.17E-05	2.56E-03
KR-85	1.08E+03	3.46E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-07	4.18E-04
KR-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.91E-04	1.54E-02
KR-88	7.54E-74	2.42E-73	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-03	9.54E-03
						0.00E+00	0.00E+00	0.00E+00	2.77E+00	4.22E-03	8.71E-02

TOTAL DOSES 0-30 DAYS	1.32E-01	2.53E-02	8.38E-03	2.77E+00	4.23E-03	8.71E-02
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QDC CRDA, CR & LPZ, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s

ISOTOPE	ACTIVITY RELEASED (CURIES)		
	0. HRS	720. HRS	
ELEMENTAL			
I-131	4.31E+00	0.00E+00	4.31E+00
I-132	6.03E+00	0.00E+00	6.03E+00
I-133	7.66E+00	0.00E+00	7.66E+00
I-134	8.58E+00	0.00E+00	8.58E+00
I-135	6.73E+00	0.00E+00	6.73E+00
PARTICULATE			
I-131	2.37E-01	0.00E+00	2.37E-01
I-132	3.32E-01	0.00E+00	3.32E-01
I-133	4.21E-01	0.00E+00	4.21E-01
I-134	4.72E-01	0.00E+00	4.72E-01
I-135	3.70E-01	0.00E+00	3.70E-01
ORGANIC			
I-131	1.90E-01	0.00E+00	1.90E-01
I-132	2.65E-01	0.00E+00	2.65E-01
I-133	3.37E-01	0.00E+00	3.37E-01
I-134	3.77E-01	0.00E+00	3.77E-01
I-135	2.96E-01	0.00E+00	2.96E-01
NOBLE GASES			
XE-131M	4.01E+00	0.00E+00	4.01E+00
XE-133M	2.08E+01	0.00E+00	2.08E+01
XE-133	8.49E+02	0.00E+00	8.49E+02
XE-135M	2.26E+02	0.00E+00	2.26E+02
XE-135	2.10E+02	0.00E+00	2.10E+02
XE-138	8.07E+02	0.00E+00	8.07E+02
KR-83M	2.14E+01	0.00E+00	2.14E+01
KR-85M	8.19E+01	0.00E+00	8.19E+01
KR-85	1.17E+01	0.00E+00	1.17E+01
KR-87	1.54E+02	0.00E+00	1.54E+02
KR-88	2.28E+02	0.00E+00	2.28E+02

END EXECUTION DATE: 11/18/1999
 END EXECUTION TIME: 17:45:17.07

1 QDC CRDA, CR & LPZ, ALL REL AOG: SIEMENS 60 GWD/MTU: 6 s - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 2.000 HOURS: X/Q(SITE)= .90E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .10E+01 VOL/DAY PCT PRI LKG TO ATM = 00.00

ISOTOPE	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS		
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER	
ELEMENTAL	.000	.000	.000	.000	.000	1.000	
PARTICULATE	.000	.000	.000	.000	.000	1.000	
ORGANIC	.000	.000	.000	.000	.000	1.000	

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	1.19E-35	1.54E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	9.19E-36	1.19E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	2.00E-35	2.58E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	4.83E-36	6.25E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	1.52E-35	1.97E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	6.54E-37	8.46E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	5.05E-37	6.53E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	1.10E-36	1.42E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	2.66E-37	3.43E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	8.37E-37	1.08E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	5.24E-37	6.77E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	4.04E-37	5.23E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	8.77E-37	1.13E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	2.12E-37	2.75E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	6.70E-37	8.66E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	1.11E-35	1.43E+03	9.26E+01	4.99E-02	9.55E-06	0.00E+00	4.59E-06	2.59E-05	0.00E+00	3.45E-05	1.25E-03
XE-133M	5.63E-35	7.28E+03	4.74E+02	2.53E-01	4.85E-05	0.00E+00	3.52E-05	1.52E-04	0.00E+00	7.79E-05	7.31E-03
XE-133	2.34E-33	3.02E+05	1.96E+04	1.05E+01	2.01E-03	0.00E+00	1.32E-03	5.92E-03	0.00E+00	7.20E-03	2.85E-01
XE-135M	3.06E-36	3.96E+02	3.47E+02	1.38E-02	2.64E-06	0.00E+00	3.29E-04	6.97E-05	0.00E+00	4.52E-04	2.61E-03
XE-135	5.03E-34	6.51E+04	4.45E+03	2.26E+00	4.33E-04	0.00E+00	2.46E-03	2.96E-03	0.00E+00	4.20E-03	1.42E-01
XE-138	1.94E-35	2.51E+03	1.58E+03	8.74E-02	1.67E-05	0.00E+00	1.02E-02	2.62E-03	0.00E+00	3.71E-03	1.00E-01
KR-83M	2.84E-35	3.67E+03	3.17E+02	1.28E-01	2.44E-05	0.00E+00	3.57E-06	2.23E-05	0.00E+00	9.05E-05	1.04E-03
KR-85M	1.66E-34	2.15E+04	1.57E+03	7.48E-01	1.43E-04	0.00E+00	5.49E-04	7.55E-04	0.00E+00	1.00E-03	3.58E-02
KR-85	3.24E-35	4.20E+03	2.70E+02	1.46E-01	2.79E-05	0.00E+00	1.28E-06	1.25E-04	0.00E+00	2.25E-06	6.01E-03
KR-87	1.43E-34	1.85E+04	1.86E+03	6.45E-01	1.23E-04	0.00E+00	5.75E-03	4.04E-03	0.00E+00	4.67E-03	1.84E-01
KR-88	3.86E-34	5.00E+04	3.91E+03	1.74E+00	3.33E-04	0.00E+00	1.53E-02	2.76E-03	0.00E+00	2.20E-02	1.30E-01
						0.00E+00	3.60E-02	1.95E-02	0.00E+00	4.35E-02	8.94E-01

1 QDC CRDA, CR & LPZ, ALL REL AOG: SIEMENS 60 GWD/MTU: 6 s - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 8.000 HOURS: X/Q(SITE)= .90E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .65E-05 SEC/M3 SEC RELEASE RATE= .10E+01 VOL/DAY PCT PRI LKG TO ATM = 00.00

ISOTOPE	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS		
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER	
ELEMENTAL	.000	.000	.000	.000	.000	1.000	
PARTICULATE	.000	.000	.000	.000	.000	1.000	
ORGANIC	.000	.000	.000	.000	.000	1.000	

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
PARTICULATE											
ORGANIC											

ELEMENTAL											
I-131	0.00E+00	1.17E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	1.52E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	1.65E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	4.03E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	8.26E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	0.00E+00	6.45E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	8.34E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	9.06E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	2.21E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	4.54E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	0.00E+00	5.16E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	6.67E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	7.25E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	1.77E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	3.63E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	0.00E+00	1.10E+03	3.15E+02	8.53E-04	1.63E-07	0.00E+00	1.56E-05	8.80E-05	0.00E+00	3.80E-05	1.37E-03
XE-133M	0.00E+00	5.25E+03	1.55E+03	4.07E-03	7.79E-07	0.00E+00	1.15E-04	4.98E-04	0.00E+00	8.40E-05	7.89E-03
XE-133	0.00E+00	2.28E+05	6.58E+04	1.77E-01	3.38E-05	0.00E+00	4.44E-03	1.99E-02	0.00E+00	7.87E-03	3.11E-01
XE-135M	0.00E+00	3.53E-05	6.10E+00	2.73E-11	5.23E-15	0.00E+00	5.79E-06	1.22E-06	0.00E+00	1.06E-05	6.14E-05
XE-135	0.00E+00	3.21E+04	1.17E+04	2.49E-02	4.76E-06	0.00E+00	6.46E-03	7.77E-03	0.00E+00	4.02E-03	1.35E-01
XE-138	0.00E+00	1.26E-03	4.33E+01	9.76E-10	1.87E-13	0.00E+00	2.80E-04	7.17E-05	0.00E+00	1.29E-04	3.50E-03
KR-83M	0.00E+00	3.09E+02	3.39E+02	2.39E-04	4.58E-08	0.00E+00	3.82E-06	2.39E-05	0.00E+00	5.23E-05	5.98E-04
KR-85M	0.00E+00	6.50E+03	3.13E+03	5.04E-03	9.64E-07	0.00E+00	1.10E-03	1.51E-03	0.00E+00	8.26E-04	2.95E-02
KR-85	0.00E+00	3.27E+03	9.28E+02	2.53E-03	4.84E-07	0.00E+00	4.38E-06	4.28E-04	0.00E+00	2.48E-06	6.64E-03
KR-87	0.00E+00	5.41E+02	1.27E+03	4.19E-04	8.03E-08	0.00E+00	3.94E-03	2.77E-03	0.00E+00	2.05E-03	8.07E-02
KR-88	0.00E+00	8.80E+03	5.92E+03	6.82E-03	1.31E-06	0.00E+00	2.32E-02	4.18E-03	0.00E+00	1.56E-02	9.16E-02
						0.00E+00	3.96E-02	3.72E-02	0.00E+00	3.07E-02	6.69E-01

1 QDC CRDA, CR & LPZ, ALL REL AOG: SIEMENS 60 GWD/MTU: 6 s - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 24.000 HOURS: X/Q(SITE)= .30E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .38E-05 SEC/M3 SEC RELEASE RATE= .10E+01 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	.000	1.000
PARTICULATE	.000	.000	.000	.000	.000	1.000
ORGANIC	.000	.000	.000	.000	.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	0.00E+00	5.69E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	6.28E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	4.99E+02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	5.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	8.12E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	0.00E+00	3.13E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	3.45E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	2.74E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	3.18E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	4.46E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	0.00E+00	2.50E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	2.76E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	2.19E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	2.54E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	3.57E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	0.00E+00	5.44E+02	5.26E+02	1.32E-04	2.53E-08	0.00E+00	8.68E-06	4.90E-05	0.00E+00	2.25E-06	8.13E-05
XE-133M	0.00E+00	2.20E+03	2.34E+03	5.34E-04	1.02E-07	0.00E+00	5.79E-05	2.50E-04	0.00E+00	4.47E-06	4.19E-04
XE-133	0.00E+00	1.07E+05	1.07E+05	2.61E-02	4.99E-06	0.00E+00	2.40E-03	1.07E-02	0.00E+00	4.52E-04	1.79E-02
XE-135M	0.00E+00	5.58E-24	5.43E-07	1.36E-30	2.64E-34	0.00E+00	1.72E-13	3.64E-14	0.00E+00	2.29E-14	1.32E-13
XE-135	0.00E+00	4.89E+03	9.64E+03	1.19E-03	2.28E-07	0.00E+00	1.78E-03	2.14E-03	0.00E+00	1.15E-04	3.87E-03
XE-138	0.00E+00	2.00E-20	2.17E-05	4.86E-27	9.29E-31	0.00E+00	4.67E-11	1.20E-11	0.00E+00	1.58E-12	4.28E-11
KR-83M	0.00E+00	4.21E-01	3.11E+01	1.02E-07	1.96E-11	0.00E+00	1.17E-07	7.31E-07	0.00E+00	1.52E-07	1.73E-06
KR-85M	0.00E+00	2.68E+02	1.30E+03	6.51E-05	1.25E-08	0.00E+00	1.52E-04	2.09E-04	0.00E+00	1.16E-05	4.14E-04
KR-85	0.00E+00	1.68E+03	1.59E+03	4.08E-04	7.80E-08	0.00E+00	2.50E-06	2.45E-04	0.00E+00	1.51E-07	4.04E-04

KR-87	0.00E+00	4.38E-02	3.83E+01	1.06E-08	2.04E-12	0.00E+00	3.95E-05	2.77E-05	0.00E+00	1.84E-06	7.27E-05
KR-88	0.00E+00	8.59E+01	1.25E+03	2.09E-05	4.00E-09	0.00E+00	1.64E-03	2.95E-04	0.00E+00	1.08E-04	6.37E-04
						0.00E+00	6.08E-03	1.40E-02	0.00E+00	6.96E-04	2.38E-02

1 QDC CRDA, CR & LPZ, ALL REL AOG: SIEMENS 60 GWD/MTU: 6 s - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 720.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	.000	1.000
PARTICULATE	.000	.000	.000	.000	.000	1.000
ORGANIC	.000	.000	.000	.000	.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	0.00E+00	4.68E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	5.23E-92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	5.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	4.78E-30	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	0.00E+00	2.57E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	2.87E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	2.88E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	2.62E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	0.00E+00	2.06E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	2.30E-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	2.31E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	2.10E-31	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	0.00E+00	9.92E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.76E-08	3.52E-06
XE-133M	0.00E+00	3.02E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E-07	1.61E-05
XE-133	0.00E+00	2.38E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.89E-05	7.48E-04
XE-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.04E-33	6.02E-33
XE-135	0.00E+00	5.36E-20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.05E-06	6.93E-05
XE-138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.16E-30	1.94E-28
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.11E-11	4.70E-10
KR-85M	0.00E+00	5.84E-46	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.02E-08	2.51E-06
KR-85	0.00E+00	1.67E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.74E-09	1.80E-05
KR-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.34E-11	1.32E-09
KR-88	0.00E+00	1.17E-73	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.83E-07	1.08E-06
						0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.15E-05	8.59E-04
TOTAL DOSES 0-30 DAYS						0.00E+00	2.12E-01	1.18E-01	0.00E+00	8.25E-02	1.75E+00

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QDC CRDA, CR & LPZ, ALL REL AOG: SIEMENS 60 GWD/MTU: 6 s - 30 d

ISOTOPE	ACTIVITY RELEASED (CURIES)				
	2. HRS	8. HRS	24. HRS	720. HRS	
ELEMENTAL					
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PARTICULATE					
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGANIC					
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES					
XE-131M	1.28E+02	3.15E+02	5.26E+02	0.00E+00	9.70E+02
XE-133M	6.59E+02	1.55E+03	2.34E+03	0.00E+00	4.55E+03
XE-133	2.72E+04	6.58E+04	1.07E+05	0.00E+00	2.00E+05
XE-135M	1.56E+03	6.10E+00	5.43E-07	0.00E+00	1.57E+03
XE-135	6.30E+03	1.17E+04	9.64E+03	0.00E+00	2.76E+04
XE-138	6.12E+03	4.33E+01	2.17E-05	0.00E+00	6.17E+03
KR-83M	4.94E+02	3.39E+02	3.11E+01	0.00E+00	8.64E+02
KR-85M	2.27E+03	3.13E+03	1.30E+03	0.00E+00	6.71E+03
KR-85	3.75E+02	9.28E+02	1.59E+03	0.00E+00	2.89E+03
KR-87	3.08E+03	1.27E+03	3.83E+01	0.00E+00	4.39E+03
KR-88	5.84E+03	5.92E+03	1.25E+03	0.00E+00	1.30E+04

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 17:45:26.13

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 17:45:33.82

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d
 2 6 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 1800 7200 2.88+4 8.64+4 2.592E6
 6 0.2402 4*1.201E-2 0.
 7 5*1. 0.
 8 6*1.
 9 6*2460
 10 2*3.2E-5 2*9.0E-6 3.0E-6 0.
 11 3*7.00E-4 6.45E-6 3.81E-6 0.
 12 6*0.
 13 6*0.
 14 6*0.
 15 6*0.
 16 6*0.
 17 6*0.
 18 6*0.
 19 6*0.
 20 6*0.
 21 6*1.
 22 3*1.
 23 7.43E+3 1.04E+4 1.32E+4 1.48E+4 1.16E+4 1.57E+3 8.14E+3 3.33E+5
 24 8.89E+4 8.25E+4 3.17E+5 8.39E+3 3.21E+4 4.57E+3 6.03E+4 8.93E+4

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QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	7.430E+03
I-132	1.040E+04
I-133	1.320E+04
I-134	1.480E+04
I-135	1.160E+04
XE-131M	1.570E+03
XE-133M	8.140E+03
XE-133	3.330E+05
XE-135M	8.890E+04
XE-135	8.250E+04
XE-138	3.170E+05
KR-83M	8.390E+03
KR-85M	3.210E+04
KR-85	4.570E+03
KR-87	6.030E+04
KR-88	8.930E+04

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QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH BODY	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	4.00E+02	1.25E+02	1.17E+03	9.46E-01	1.81E-04	1.91E+01	3.46E-03	1.69E-03	2.88E-01	1.86E-06	2.54E-05
I-132	5.60E+02	1.75E+02	1.63E+03	1.32E+00	2.53E-04	9.69E-01	3.13E-02	5.38E-03	1.46E-02	1.45E-05	8.08E-05
I-133	7.11E+02	2.22E+02	2.07E+03	1.68E+00	3.22E-04	9.19E+00	7.90E-03	6.44E-03	1.38E-01	5.31E-06	9.69E-05
I-134	7.96E+02	2.49E+02	2.32E+03	1.88E+00	3.60E-04	6.44E-01	3.60E-02	7.77E-03	9.68E-03	2.22E-05	1.17E-04

I-135	6.24E+02	1.95E+02	1.82E+03	1.48E+00	2.83E-04	2.50E+00	2.59E-02	4.12E-03	3.76E-02	9.47E-06	6.20E-05
PARTICULATE											
I-131	2.20E+01	6.88E+00	6.40E+01	5.20E-02	9.95E-06	1.05E+00	1.90E-04	9.28E-05	1.58E-02	1.02E-07	1.40E-06
I-132	3.07E+01	9.62E+00	8.96E+01	7.27E-02	1.39E-05	5.32E-02	1.72E-03	2.95E-04	8.00E-04	7.99E-07	4.44E-06
I-133	3.90E+01	1.22E+01	1.14E+02	9.24E-02	1.77E-05	5.05E-01	4.34E-04	3.54E-04	7.59E-03	2.92E-07	5.32E-06
I-134	4.37E+01	1.37E+01	1.27E+02	1.03E-01	1.98E-05	3.54E-02	1.98E-03	4.27E-04	5.32E-04	1.22E-06	6.41E-06
I-135	3.43E+01	1.07E+01	9.99E+01	8.12E-02	1.55E-05	1.38E-01	1.42E-03	2.27E-04	2.07E-03	5.20E-07	3.41E-06
ORGANIC											
I-131	1.76E+01	5.50E+00	5.12E+01	4.16E-02	7.96E-06	8.42E-01	1.52E-04	7.43E-05	1.27E-02	8.16E-08	1.12E-06
I-132	2.46E+01	7.70E+00	7.17E+01	5.82E-02	1.11E-05	4.26E-02	1.38E-03	2.36E-04	6.40E-04	6.39E-07	3.55E-06
I-133	3.12E+01	9.77E+00	9.10E+01	7.39E-02	1.41E-05	4.04E-01	3.47E-04	2.83E-04	6.08E-03	2.34E-07	4.26E-06
I-134	3.50E+01	1.09E+01	1.02E+02	8.27E-02	1.58E-05	2.83E-02	1.58E-03	3.41E-04	4.25E-04	9.76E-07	5.13E-06
I-135	2.74E+01	8.59E+00	8.00E+01	6.49E-02	1.24E-05	1.10E-01	1.14E-03	1.81E-04	1.65E-03	4.16E-07	2.72E-06
NOBLE GASES											
XE-131M	3.72E+02	1.16E+02	1.08E+03	8.79E-01	1.68E-04	0.00E+00	1.90E-04	1.08E-03	0.00E+00	4.48E-07	1.62E-05
XE-133M	1.93E+03	6.03E+02	5.61E+03	4.56E+00	8.72E-04	0.00E+00	1.48E-03	6.40E-03	0.00E+00	1.02E-06	9.62E-05
XE-133	7.88E+04	2.47E+04	2.30E+05	1.86E+02	3.57E-02	0.00E+00	5.51E-02	2.47E-01	0.00E+00	9.38E-05	3.71E-03
XE-135M	2.09E+04	6.55E+03	6.11E+04	4.95E+01	9.48E-03	0.00E+00	2.06E-01	4.37E-02	0.00E+00	1.14E-04	6.56E-04
XE-135	1.95E+04	6.11E+03	5.69E+04	4.62E+01	8.84E-03	0.00E+00	1.12E-01	1.35E-01	0.00E+00	6.01E-05	2.03E-03
XE-138	7.47E+04	2.34E+04	2.18E+05	1.77E+02	3.38E-02	0.00E+00	5.01E+00	1.28E+00	0.00E+00	7.13E-04	1.93E-02
KR-83M	1.98E+03	6.21E+02	5.78E+03	4.69E+00	8.98E-04	0.00E+00	2.31E-04	1.45E-03	0.00E+00	1.90E-06	2.17E-05
KR-85M	7.59E+03	2.38E+03	2.21E+04	1.80E+01	3.44E-03	0.00E+00	2.76E-02	3.79E-02	0.00E+00	1.59E-05	5.70E-04
KR-85	1.08E+03	3.38E+02	3.15E+03	2.56E+00	4.90E-04	0.00E+00	5.29E-05	5.17E-03	0.00E+00	2.91E-08	7.77E-05
KR-87	1.43E+04	4.46E+03	4.15E+04	3.37E+01	6.46E-03	0.00E+00	4.57E-01	3.21E-01	0.00E+00	1.22E-04	4.83E-03
KR-88	2.11E+04	6.61E+03	6.15E+04	5.00E+01	9.57E-03	0.00E+00	8.58E-01	1.54E-01	0.00E+00	3.95E-04	2.32E-03
						3.57E+01	6.84E+00	2.26E+00	5.36E-01	1.58E-03	3.40E-02

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .500 HOURS: X/Q(SITE)= .32E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	1.75E-07	2.13E-09	5.25E+02	9.24E-01	1.77E-04	8.63E+00	1.56E-03	7.61E-04	1.98E+02	1.27E-03	1.74E-02
I-132	2.12E-07	2.57E-09	7.31E+02	1.11E+00	2.13E-04	4.34E-01	1.40E-02	2.41E-03	9.33E+00	9.31E-03	5.18E-02
I-133	3.07E-07	3.73E-09	9.32E+02	1.62E+00	3.10E-04	4.14E+00	3.56E-03	2.90E-03	9.43E+01	3.62E-03	6.61E-02
I-134	2.35E-07	2.85E-09	1.03E+03	1.24E+00	2.37E-04	2.86E-01	1.60E-02	3.45E-03	5.54E+00	1.27E-02	6.69E-02
I-135	2.61E-07	3.17E-09	8.18E+02	1.37E+00	3.63E-04	1.13E+00	1.16E-02	1.85E-03	2.53E+01	6.35E-03	4.16E-02
PARTICULATE											
I-131	9.64E-09	1.17E-10	2.89E+01	5.08E-02	9.72E-06	4.74E-01	8.56E-05	4.18E-05	1.09E+01	7.00E-05	9.58E-04
I-132	1.16E-08	1.41E-10	4.02E+01	6.12E-02	1.17E-05	2.39E-02	7.71E-04	1.32E-04	5.13E-01	5.12E-04	2.84E-03
I-133	1.69E-08	2.05E-10	5.12E+01	8.89E-02	1.70E-05	2.28E-01	1.95E-04	1.59E-04	5.18E+00	1.99E-04	3.63E-03
I-134	1.29E-08	1.57E-10	5.66E+01	6.79E-02	1.30E-05	1.57E-02	8.78E-04	1.90E-04	3.05E-01	6.99E-04	3.67E-03
I-135	1.43E-08	1.74E-10	4.50E+01	7.54E-02	1.44E-05	6.19E-02	6.40E-04	1.02E-04	1.39E+00	3.49E-04	2.28E-03
ORGANIC											
I-131	7.71E-09	9.37E-11	2.31E+01	4.06E-02	7.78E-06	3.79E-01	6.85E-05	3.35E-05	8.69E+00	5.60E-05	7.67E-04
I-132	9.30E-09	1.13E-10	3.21E+01	4.90E-02	9.38E-06	1.91E-02	6.17E-04	1.06E-04	4.10E-01	4.09E-04	2.28E-03
I-133	1.35E-08	1.64E-10	4.10E+01	7.11E-02	1.36E-05	1.82E-01	1.56E-04	1.28E-04	4.14E+00	1.59E-04	2.90E-03
I-134	1.03E-08	1.25E-10	4.53E+01	5.44E-02	1.04E-05	1.26E-02	7.02E-04	1.52E-04	2.44E-01	5.59E-04	2.94E-03
I-135	1.15E-08	1.39E-10	3.60E+01	6.03E-02	1.15E-05	4.95E-02	5.12E-04	8.15E-05	1.11E+00	2.79E-04	1.83E-03
NOBLE GASES											
XE-131M	1.63E-07	1.98E-09	4.88E+02	8.59E-01	1.64E-04	0.00E+00	8.58E-05	4.85E-04	0.00E+00	3.08E-04	1.11E-02
XE-133M	8.41E-07	1.02E-08	2.53E+03	4.43E+00	8.48E-04	0.00E+00	6.67E-04	2.88E-03	0.00E+00	7.02E-04	6.59E-02
XE-133	3.45E-05	4.20E-07	1.03E+05	1.82E+02	3.48E-02	0.00E+00	2.48E-02	1.11E-01	0.00E+00	6.44E-02	2.55E+00
XE-135M	2.44E-06	2.96E-08	2.63E+04	1.29E+01	2.46E-03	0.00E+00	8.87E-02	1.87E-02	0.00E+00	4.47E-02	2.58E-01
XE-135	8.26E-06	1.00E-07	2.56E+04	4.35E+01	8.33E-03	0.00E+00	5.04E-02	6.07E-02	0.00E+00	4.05E-02	1.37E+00
XE-138	1.00E-05	1.22E-07	9.41E+04	5.29E+01	1.01E-02	0.00E+00	2.16E+00	5.54E-01	0.00E+00	2.95E-01	8.00E+00
KR-83M	7.25E-07	8.81E-09	2.59E+03	3.82E+00	7.31E-04	0.00E+00	1.04E-04	6.48E-04	0.00E+00	1.20E-03	1.37E-02
KR-85M	3.08E-06	3.75E-08	9.94E+03	1.62E+01	3.11E-03	0.00E+00	1.24E-02	1.70E-02	0.00E+00	1.06E-02	3.78E-01
KR-85	4.75E-07	5.77E-09	1.42E+03	2.50E+00	4.79E-04	0.00E+00	2.39E-05	2.33E-03	0.00E+00	2.00E-05	5.34E-02
KR-87	4.77E-06	5.80E-08	1.85E+04	2.51E+01	4.81E-03	0.00E+00	2.04E-01	1.43E-01	0.00E+00	7.42E-02	2.92E+00
KR-88	8.20E-06	9.97E-08	2.76E+04	4.32E+01	8.27E-03	0.00E+00	3.85E-01	6.93E-02	0.00E+00	2.56E-01	1.51E+00
						1.61E+01	2.98E+00	9.93E-01	3.65E+02	8.25E-01	1.74E+01

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 2.000 HOURS: X/Q(SITE) = .90E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .70E-03 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: ISOTOPE, ACTIVITY (CURIES), CONTROL ROOM (CURIES), SITE BOUNDARY DOSES (REM), CONTROL ROOM DOSES (REM). Includes sub-sections for CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS.

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 8.000 HOURS: X/Q(SITE) = .90E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .65E-05 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: ISOTOPE, ACTIVITY (CURIES), CONTROL ROOM (CURIES), SITE BOUNDARY DOSES (REM), CONTROL ROOM DOSES (REM). Includes sub-sections for CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS.

ELEMENTAL												
I-131	0.00E+00	0.00E+00	1.21E-35	2.23E-03	4.27E-07	5.57E-38	1.01E-41	4.92E-42	1.21E+02	7.80E-04	1.07E-02	
I-132	0.00E+00	0.00E+00	9.24E-36	2.88E-04	5.52E-08	1.54E-39	4.99E-41	8.57E-42	2.48E+00	2.47E-03	1.38E-02	
I-133	0.00E+00	0.00E+00	2.02E-35	3.13E-03	5.99E-07	2.52E-38	2.17E-41	1.77E-41	5.29E+01	2.03E-03	3.71E-02	
I-134	0.00E+00	0.00E+00	4.80E-36	7.64E-06	1.46E-09	3.75E-40	2.10E-41	4.52E-42	4.20E-01	9.63E-04	5.06E-03	
I-135	0.00E+00	0.00E+00	1.54E-35	1.57E-03	3.00E-07	5.96E-39	6.16E-41	9.81E-42	1.16E+01	2.91E-03	1.90E-02	
PARTICULATE												
I-131	0.00E+00	0.00E+00	6.62E-37	1.23E-04	2.35E-08	3.06E-39	5.53E-43	2.70E-43	6.64E+00	4.28E-05	5.86E-04	
I-132	0.00E+00	0.00E+00	5.08E-37	1.58E-05	3.03E-09	8.48E-41	2.74E-42	4.71E-43	1.36E-01	1.36E-04	7.56E-04	
I-133	0.00E+00	0.00E+00	1.11E-36	1.72E-04	3.29E-08	1.38E-39	1.19E-42	9.71E-43	2.91E+00	1.12E-04	2.04E-03	
I-134	0.00E+00	0.00E+00	2.64E-37	4.20E-07	8.04E-11	2.06E-41	1.15E-42	2.49E-43	2.31E-02	5.29E-05	2.78E-04	
I-135	0.00E+00	0.00E+00	8.45E-37	8.61E-05	1.65E-08	3.27E-40	3.38E-42	5.39E-43	6.36E-01	1.60E-04	1.05E-03	
ORGANIC												
I-131	0.00E+00	0.00E+00	5.30E-37	9.80E-05	1.88E-08	2.45E-39	4.42E-43	2.16E-43	5.32E+00	3.43E-05	4.69E-04	
I-132	0.00E+00	0.00E+00	4.06E-37	1.27E-05	2.43E-09	6.78E-41	2.19E-42	3.77E-43	1.09E-01	1.09E-04	6.05E-04	
I-133	0.00E+00	0.00E+00	8.87E-37	1.38E-04	2.63E-08	1.11E-39	9.52E-43	7.77E-43	2.32E+00	8.94E-05	1.63E-03	
I-134	0.00E+00	0.00E+00	2.11E-37	3.36E-07	6.43E-11	1.65E-41	9.21E-43	1.99E-43	1.85E-02	4.23E-05	2.23E-04	
I-135	0.00E+00	0.00E+00	6.76E-37	6.89E-05	1.32E-08	2.62E-40	2.71E-42	4.31E-43	5.09E-01	1.28E-04	8.37E-04	
NOBLE GASES												
XE-131M	0.00E+00	0.00E+00	1.12E-35	2.09E-03	4.00E-07	0.00E+00	5.55E-43	3.14E-42	0.00E+00	1.89E-04	6.82E-03	
XE-133M	0.00E+00	0.00E+00	5.70E-35	9.98E-03	1.91E-06	0.00E+00	4.23E-42	1.83E-41	0.00E+00	4.18E-04	3.93E-02	
XE-133	0.00E+00	0.00E+00	2.37E-33	4.33E-01	8.28E-05	0.00E+00	1.60E-40	7.15E-40	0.00E+00	3.92E-02	1.55E+00	
XE-135M	0.00E+00	0.00E+00	2.92E-36	6.70E-11	1.28E-14	0.00E+00	2.77E-42	5.86E-43	0.00E+00	5.48E-05	3.16E-04	
XE-135	0.00E+00	0.00E+00	5.08E-34	6.10E-02	1.17E-05	0.00E+00	2.81E-40	3.39E-40	0.00E+00	2.01E-02	6.78E-01	
XE-138	0.00E+00	0.00E+00	1.86E-35	2.39E-09	4.58E-13	0.00E+00	1.20E-40	3.09E-41	0.00E+00	6.66E-04	1.80E-02	
KR-83M	0.00E+00	0.00E+00	2.85E-35	5.86E-04	1.12E-07	0.00E+00	3.20E-43	2.00E-42	0.00E+00	2.65E-04	3.03E-03	
KR-85M	0.00E+00	0.00E+00	1.68E-34	1.23E-02	2.36E-06	0.00E+00	5.88E-41	8.08E-41	0.00E+00	4.15E-03	1.48E-01	
KR-85	0.00E+00	0.00E+00	3.28E-35	6.20E-03	1.19E-06	0.00E+00	1.55E-43	1.52E-41	0.00E+00	1.24E-05	3.30E-02	
KR-87	0.00E+00	0.00E+00	1.43E-34	1.03E-03	1.97E-07	0.00E+00	4.43E-40	3.11E-40	0.00E+00	1.04E-02	4.11E-01	
KR-88	0.00E+00	0.00E+00	3.89E-34	1.67E-02	3.20E-06	0.00E+00	1.52E-39	2.74E-40	0.00E+00	7.86E-02	4.62E-01	
							9.76E-38	2.78E-39	1.84E-39	2.07E+02	1.64E-01	3.44E+00

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 24.000 HOURS: X/Q(SITE)= .30E-05 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .38E-05 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA		
ELEMENTAL											
I-131	0.00E+00	0.00E+00	0.00E+00	5.81E-09	1.11E-12	0.00E+00	0.00E+00	0.00E+00	9.82E-01	6.33E-06	8.66E-05
I-132	0.00E+00	0.00E+00	0.00E+00	6.41E-12	1.23E-15	0.00E+00	0.00E+00	0.00E+00	3.35E-03	3.34E-06	1.86E-05
I-133	0.00E+00	0.00E+00	0.00E+00	5.10E-09	9.76E-13	0.00E+00	0.00E+00	0.00E+00	3.59E-01	1.38E-05	2.52E-04
I-134	0.00E+00	0.00E+00	0.00E+00	5.90E-17	1.13E-20	0.00E+00	0.00E+00	0.00E+00	2.86E-05	6.55E-08	3.45E-07
I-135	0.00E+00	0.00E+00	0.00E+00	8.29E-10	1.59E-13	0.00E+00	0.00E+00	0.00E+00	5.15E-02	1.29E-05	8.47E-05
PARTICULATE											
I-131	0.00E+00	0.00E+00	0.00E+00	3.19E-10	6.11E-14	0.00E+00	0.00E+00	0.00E+00	5.40E-02	3.48E-07	4.76E-06
I-132	0.00E+00	0.00E+00	0.00E+00	3.52E-13	6.75E-17	0.00E+00	0.00E+00	0.00E+00	1.84E-04	1.84E-07	1.02E-06
I-133	0.00E+00	0.00E+00	0.00E+00	2.80E-10	5.36E-14	0.00E+00	0.00E+00	0.00E+00	1.97E-02	7.59E-07	1.38E-05
I-134	0.00E+00	0.00E+00	0.00E+00	3.24E-18	6.21E-22	0.00E+00	0.00E+00	0.00E+00	1.57E-06	3.60E-09	1.89E-08
I-135	0.00E+00	0.00E+00	0.00E+00	4.55E-11	8.71E-15	0.00E+00	0.00E+00	0.00E+00	2.83E-03	7.11E-07	4.65E-06
ORGANIC											
I-131	0.00E+00	0.00E+00	0.00E+00	2.56E-10	4.89E-14	0.00E+00	0.00E+00	0.00E+00	4.32E-02	2.78E-07	3.81E-06
I-132	0.00E+00	0.00E+00	0.00E+00	2.82E-13	5.40E-17	0.00E+00	0.00E+00	0.00E+00	1.47E-04	1.47E-07	8.17E-07
I-133	0.00E+00	0.00E+00	0.00E+00	2.24E-10	4.29E-14	0.00E+00	0.00E+00	0.00E+00	1.58E-02	6.07E-07	1.11E-05
I-134	0.00E+00	0.00E+00	0.00E+00	2.59E-18	4.96E-22	0.00E+00	0.00E+00	0.00E+00	1.26E-06	2.88E-09	1.52E-08
I-135	0.00E+00	0.00E+00	0.00E+00	3.64E-11	6.97E-15	0.00E+00	0.00E+00	0.00E+00	2.26E-03	5.69E-07	3.72E-06
NOBLE GASES											
XE-131M	0.00E+00	0.00E+00	0.00E+00	5.55E-09	1.06E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-06	5.57E-05
XE-133M	0.00E+00	0.00E+00	0.00E+00	2.25E-08	4.30E-12	0.00E+00	0.00E+00	0.00E+00	3.21E-06	3.02E-04	3.02E-04
XE-133	0.00E+00	0.00E+00	0.00E+00	1.09E-06	2.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.14E-04	1.24E-02
XE-135M	0.00E+00	0.00E+00	0.00E+00	5.70E-35	1.09E-38	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.16E-14	2.97E-13
XE-135	0.00E+00	0.00E+00	0.00E+00	4.99E-08	9.56E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-04	3.55E-03
XE-138	0.00E+00	0.00E+00	0.00E+00	2.04E-31	3.90E-35	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.53E-12	9.55E-11
KR-83M	0.00E+00	0.00E+00	0.00E+00	4.29E-10	8.22E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.36E-07	2.70E-06
KR-85M	0.00E+00	0.00E+00	0.00E+00	2.73E-09	5.23E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.33E-05	4.76E-04
KR-85	0.00E+00	0.00E+00	0.00E+00	1.71E-08	3.28E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-07	2.74E-04

KR-87	0.00E+00	0.00E+00	0.00E+00	4.47E-13	8.56E-17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-06	1.27E-04
KR-88	0.00E+00	0.00E+00	0.00E+00	8.77E-10	1.68E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E-04	8.62E-04
						0.00E+00	0.00E+00	0.00E+00	1.53E+00	6.28E-04	1.86E-02

1 QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 720.000 HOURS: X/Q(SITE)= .00E+00 SEC/M3 PRIMARY LEAK RATE= .000 PERCENT/DAY CONTROL ROOM INTAKE=2460.0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .00E+00 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.56E-06	1.65E-11	2.26E-10
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.45E-11	7.44E-14	4.14E-13
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.85E-07	2.25E-11	4.10E-10
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.21E-16	5.06E-19	2.66E-18
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.72E-08	6.84E-12	4.48E-11
PARTICULATE											
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-07	9.07E-13	1.24E-11
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.09E-12	4.09E-15	2.27E-14
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.22E-08	1.24E-12	2.25E-11
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.21E-17	2.78E-20	1.46E-19
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.49E-09	3.76E-13	2.46E-12
ORGANIC											
I-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-07	7.25E-13	9.93E-12
I-132	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E-12	3.27E-15	1.82E-14
I-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.57E-08	9.89E-13	1.80E-11
I-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.70E-18	2.22E-20	1.17E-19
I-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-09	3.01E-13	1.97E-12
NOBLE GASES											
XE-131M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.10E-12	1.48E-10
XE-133M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.22E-12	6.79E-10
XE-135M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.95E-10	3.14E-08
XE-131	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.39E-38	2.53E-37
XE-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.63E-11	2.91E-09
XE-135	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.01E-34	8.14E-33
KR-83M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.73E-15	1.98E-14
KR-85M	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.95E-12	1.05E-10
KR-85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.83E-13	7.57E-10
KR-87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-15	5.53E-14
KR-88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.70E-12	4.52E-11
						0.00E+00	0.00E+00	0.00E+00	3.49E-06	9.54E-10	3.68E-08
TOTAL DOSES 0-30 DAYS						5.17E+01	9.82E+00	3.26E+00	1.09E+03	1.65E+00	3.40E+01

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QDC CRDA, CR & LPZ, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 30 d

ISOTOPE	ACTIVITY RELEASED (CURIES)			
	2. HRS	8. HRS	24. HRS	720. HRS
ELEMENTAL				
I-131	1.69E+03	1.21E-35	0.00E+00	0.00E+00
I-132	2.36E+03	9.24E-36	0.00E+00	0.00E+00
I-133	3.00E+03	2.02E-35	0.00E+00	0.00E+00
I-134	3.35E+03	4.80E-36	0.00E+00	0.00E+00
I-135	2.64E+03	1.54E-35	0.00E+00	0.00E+00
PARTICULATE				
I-131	9.29E+01	6.62E-37	0.00E+00	0.00E+00
I-132	1.30E+02	5.08E-37	0.00E+00	0.00E+00
I-133	1.65E+02	1.11E-36	0.00E+00	0.00E+00
I-134	1.84E+02	2.64E-37	0.00E+00	0.00E+00
I-135	1.45E+02	8.45E-37	0.00E+00	0.00E+00
ORGANIC				
I-131	7.43E+01	5.30E-37	0.00E+00	0.00E+00
I-132	1.04E+02	4.06E-37	0.00E+00	0.00E+00

I-133	1.32E+02	8.87E-37	0.00E+00	0.00E+00	1.32E+02
I-134	1.47E+02	2.11E-37	0.00E+00	0.00E+00	1.47E+02
I-135	1.16E+02	6.76E-37	0.00E+00	0.00E+00	1.16E+02
NOBLE GASES					
XE-131M	1.57E+03	1.12E-35	0.00E+00	0.00E+00	1.57E+03
XE-133M	8.14E+03	5.70E-35	0.00E+00	0.00E+00	8.14E+03
XE-133	3.33E+05	2.37E-33	0.00E+00	0.00E+00	3.33E+05
XE-135M	8.74E+04	2.92E-36	0.00E+00	0.00E+00	8.74E+04
XE-135	8.25E+04	5.08E-34	0.00E+00	0.00E+00	8.25E+04
XE-138	3.12E+05	1.86E-35	0.00E+00	0.00E+00	3.12E+05
KR-83M	8.37E+03	2.85E-35	0.00E+00	0.00E+00	8.37E+03
KR-85M	3.21E+04	1.68E-34	0.00E+00	0.00E+00	3.21E+04
KR-85	4.57E+03	3.28E-35	0.00E+00	0.00E+00	4.57E+03
KR-87	6.01E+04	1.43E-34	0.00E+00	0.00E+00	6.01E+04
KR-88	8.92E+04	3.89E-34	0.00E+00	0.00E+00	8.92E+04

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 17:45:33.98

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 17:45:42.39

1 QDC CRDA, EAB, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s
 2 2 1 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 7200
 6 0.2402 0.
 7 9.058E-4 0.
 8 2*1.
 9 2*0.
 10 2.9E-4 0.
 11 2*0.
 12 2*0.
 13 2*0.
 14 2*0.
 15 2*0.
 16 2*0.
 17 2*0.
 18 2*0.
 19 2*0.
 20 2*0.
 21 6*1.
 22 3*1.
 23 7.43E+3 1.04E+4 1.32E+4 1.48E+4 1.16E+4 1.57E+3 8.14E+3 3.33E+5
 24 8.89E+4 8.25E+4 3.17E+5 8.39E+3 3.21E+4 4.57E+3 6.03E+4 8.93E+4

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QDC CRDA, EAB, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s

INITIAL CONTAINMENT INVENTORY

ISOTOPE	ACTIVITY (CURIES)
I-131	7.430E+03
I-132	1.040E+04
I-133	1.320E+04
I-134	1.480E+04
I-135	1.160E+04
XE-131M	1.570E+03
XE-133M	8.140E+03
XE-133	3.330E+05
XE-135M	8.890E+04
XE-135	8.250E+04
XE-138	3.170E+05
KR-83M	8.390E+03
KR-85M	3.210E+04
KR-85	4.570E+03
KR-87	6.030E+04
KR-88	8.930E+04

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QDC CRDA, EAB, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0 CFM
 X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .78E+02 VOL/DAY PCT PRI LKG TO ATM = 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	4.00E+02	1.29E+03	4.31E+00	0.00E+00	0.00E+00	6.42E-01	1.16E-04	5.67E-05	0.00E+00	0.00E+00	0.00E+00
I-132	5.60E+02	1.80E+03	6.03E+00	0.00E+00	0.00E+00	3.25E-02	1.05E-03	1.80E-04	0.00E+00	0.00E+00	0.00E+00
I-133	7.11E+02	2.28E+03	7.66E+00	0.00E+00	0.00E+00	3.08E-01	2.65E-04	2.16E-04	0.00E+00	0.00E+00	0.00E+00
I-134	7.96E+02	2.56E+03	8.58E+00	0.00E+00	0.00E+00	2.16E-02	1.21E-03	2.60E-04	0.00E+00	0.00E+00	0.00E+00

TOTAL DOSES 0-30 DAYS	=====	=====	=====	=====	=====	=====
	1.20E+00	2.29E-01	7.59E-02	0.00E+00	0.00E+00	0.00E+00

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QDC CRDA, EAB, ALL REL MVP: SIEMENS 60 GWD/MTU: 0 - 6 s

ISOTOPE	ACTIVITY RELEASED (CURIES)	
	2. HRS	
ELEMENTAL		
I-131	4.31E+00	4.31E+00
I-132	6.03E+00	6.03E+00
I-133	7.66E+00	7.66E+00
I-134	8.58E+00	8.58E+00
I-135	6.73E+00	6.73E+00
PARTICULATE		
I-131	2.37E-01	2.37E-01
I-132	3.32E-01	3.32E-01
I-133	4.21E-01	4.21E-01
I-134	4.72E-01	4.72E-01
I-135	3.70E-01	3.70E-01
ORGANIC		
I-131	1.90E-01	1.90E-01
I-132	2.65E-01	2.65E-01
I-133	3.37E-01	3.37E-01
I-134	3.77E-01	3.77E-01
I-135	2.96E-01	2.96E-01
NOBLE GASES		
XE-131M	4.01E+00	4.01E+00
XE-133M	2.08E+01	2.08E+01
XE-133	8.49E+02	8.49E+02
XE-135M	2.26E+02	2.26E+02
XE-135	2.10E+02	2.10E+02
XE-138	8.07E+02	8.07E+02
KR-83M	2.14E+01	2.14E+01
KR-85M	8.19E+01	8.19E+01
KR-85	1.17E+01	1.17E+01
KR-87	1.54E+02	1.54E+02
KR-88	2.28E+02	2.28E+02

END EXECUTION DATE: 11/18/1999
 END EXECUTION TIME: 17:45:42.39

1 QDC CRDA, EAB, ALL REL AOG: SIEMENS 60 GWD/MTU: 6 s - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 2.000 HOURS: X/Q(SITE)= .23E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0 CFM
X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .10E+01 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with columns: ISOTOPE, ACTIVITY (CURIES), CONTROL ROOM (CURIES), SITE BOUNDARY DOSES (REM), CONTROL ROOM DOSES (REM). Includes sub-sections for CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS.

1 QDC CRDA, EAB, ALL REL AOG: SIEMENS 60 GWD/MTU: 6 s - 2 h

Table with columns: ISOTOPE, 2. HRS, ACTIVITY RELEASED (CURIES). Lists isotopes and their activity released over 2 hours.

XE-133M	6.59E+02	6.59E+02
XE-133	2.72E+04	2.72E+04
XE-135M	1.56E+03	1.56E+03
XE-135	6.30E+03	6.30E+03
XE-138	6.12E+03	6.12E+03
KR-83M	4.94E+02	4.94E+02
KR-85M	2.27E+03	2.27E+03
KR-85	3.75E+02	3.75E+02
KR-87	3.08E+03	3.08E+03
KR-88	5.84E+03	5.84E+03

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 17:45:50.52

AXIDENT VER 2 MOD 4
 PRODUCTION DATE 02/18/92
 BEGIN EXECUTION DATE: 11/18/1999
 BEGIN EXECUTION TIME: 17:46:00.57

1 QDC CRDA, EAB, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 2 h
 2 3 2 1. 1.
 3 -2561 2.60+6 1.845+5 5.83+4
 4 0. 0. 0. 1. 1. 2.78+5 0.
 5 6 1800 7200
 6 0.2402 2*1.201E-2
 7 3*1.
 8 3*1.
 9 3*0.
 10 2*2.9e-4 2.3E-5
 11 3*0.
 12 3*0.
 13 3*0.
 14 3*0.
 15 3*0.
 16 3*0.
 17 3*0.
 18 3*0.
 19 3*0.
 20 3*0.
 21 6*1.
 22 3*1.
 23 7.43E+3 1.04E+4 1.32E+4 1.48E+4 1.16E+4 1.57E+3 8.14E+3 3.33E+5
 24 8.89E+4 8.25E+4 3.17E+5 8.39E+3 3.21E+4 4.57E+3 6.03E+4 8.93E+4

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QDC CRDA, EAB, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 2 h

INITIAL CONTAINMENT INVENTORY

ISOTOPE ACTIVITY (CURIES)

I-131 7.430E+03
 I-132 1.040E+04
 I-133 1.320E+04
 I-134 1.480E+04
 I-135 1.160E+04
 XE-131M 1.570E+03
 XE-133M 8.140E+03
 XE-133 3.330E+05
 XE-135M 8.890E+04
 XE-135 8.250E+04
 XE-138 3.170E+05
 KR-83M 8.390E+03
 KR-85M 3.210E+04
 KR-85 4.570E+03
 KR-87 6.030E+04
 KR-88 8.930E+04

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QDC CRDA, EAB, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO
 SPRAYED VOL

AT .002 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=
 .0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM =
 00.00

	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS	
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER
ELEMENTAL	.000	.000	.000	.000	1.000	1.000
PARTICULATE	.000	.000	.000	.000	1.000	1.000
ORGANIC	.000	.000	.000	.000	1.000	1.000

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	4.00E+02	1.25E+02	1.17E+03	0.00E+00	0.00E+00	1.74E+02	3.13E-02	1.53E-02	0.00E+00	0.00E+00	0.00E+00
I-132	5.60E+02	1.75E+02	1.63E+03	0.00E+00	0.00E+00	8.78E+00	2.84E-01	4.87E-02	0.00E+00	0.00E+00	0.00E+00
I-133	7.11E+02	2.22E+02	2.07E+03	0.00E+00	0.00E+00	8.33E+01	7.16E-02	5.84E-02	0.00E+00	0.00E+00	0.00E+00
I-134	7.96E+02	2.49E+02	2.32E+03	0.00E+00	0.00E+00	5.84E+00	3.26E-01	7.04E-02	0.00E+00	0.00E+00	0.00E+00

Table with 12 columns showing concentrations for various isotopes (I-135, I-131, I-132, I-133, I-134, I-135) categorized by PARTICULATE, ORGANIC, and NOBLE GASES. Values are in scientific notation (e.g., 6.24E+02).

1 QDC CRDA, EAB, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT .500 HOURS: X/Q(SITE)= .29E-03 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE= .0 CFM
X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

Table with 7 columns: CLEANUP RATES (HR-1) and FILTER NON-REMOVAL FACTORS. Rows include ELEMENTAL, PARTICULATE, and ORGANIC categories with values for SPRAY, PRIMARY, SECONDARY, CONT CENTER, RELEASE, and CONT CENTER.

Table with 12 columns: ACTIVITY (CURIES), CONTROL ROOM (CURIES) (UCI/CM3), and SITE BOUNDARY DOSES (REM) THYROID, WH BODY, BETA. Rows include ISOTOPE (I-131 to I-135), ELEMENTAL, PARTICULATE, ORGANIC, and NOBLE GASES.

1 QDC CRDA, EAB, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 2 h

ANALYSIS BASED ON: 2561 MWT, 184500. FT3 CONT CENTER VOLUME, 58300. FT3 CONTROL ROOM VOLUME, 30.31 FT EFF RADIUS

1. FT3 SPRAYED VOL, 278000. FT3 UNSPRAYED VOL, 1. CFM MIXING, 00.00 PCT REL TO SPRAYED VOL

AT 2.000 HOURS: X/Q(SITE)= .23E-04 SEC/M3 PRIMARY LEAK RATE=***** PERCENT/DAY CONTROL ROOM INTAKE=.0 CFM

X/Q CONT ROOM= .00E+00 SEC/M3 SEC RELEASE RATE= .86E+05 VOL/DAY PCT PRI LKG TO ATM = 00.00

ISOTOPE	CLEANUP RATES (HR-1)				FILTER NON-REMOVAL FACTORS		
	SPRAY	PRIMARY	SECONDARY	CONT CENTER	RELEASE	CONT CENTER	
ELEMENTAL	.000	.000	.000	.000	1.000	1.000	
PARTICULATE	.000	.000	.000	.000	1.000	1.000	
ORGANIC	.000	.000	.000	.000	1.000	1.000	

ISOTOPE	ACTIVITY (CURIES)			CONTROL ROOM (CURIES) (UCI/CM3)		SITE BOUNDARY DOSES (REM)			CONTROL ROOM DOSES (REM)		
	PRIMARY	SECONDARY	RELEASE	(CURIES)	(UCI/CM3)	THYROID	WH BODY	BETA	THYROID	WH BODY	BETA
ELEMENTAL											
I-131	1.19E-35	1.45E-37	1.78E-07	0.00E+00	0.00E+00	2.10E-09	3.79E-13	1.85E-13	0.00E+00	0.00E+00	0.00E+00
I-132	9.19E-36	1.12E-37	2.13E-07	0.00E+00	0.00E+00	9.08E-11	2.93E-12	5.04E-13	0.00E+00	0.00E+00	0.00E+00
I-133	2.00E-35	2.43E-37	3.11E-07	0.00E+00	0.00E+00	9.91E-10	8.52E-13	6.95E-13	0.00E+00	0.00E+00	0.00E+00
I-134	4.83E-36	5.87E-38	2.33E-07	0.00E+00	0.00E+00	4.65E-11	2.60E-12	5.61E-13	0.00E+00	0.00E+00	0.00E+00
I-135	1.52E-35	1.85E-37	2.63E-07	0.00E+00	0.00E+00	2.60E-10	2.69E-12	4.29E-13	0.00E+00	0.00E+00	0.00E+00
PARTICULATE											
I-131	6.54E-37	7.96E-39	9.75E-09	0.00E+00	0.00E+00	1.15E-10	2.08E-14	1.02E-14	0.00E+00	0.00E+00	0.00E+00
I-132	5.05E-37	6.14E-39	1.17E-08	0.00E+00	0.00E+00	4.99E-12	1.61E-13	2.77E-14	0.00E+00	0.00E+00	0.00E+00
I-133	1.10E-36	1.33E-38	1.71E-08	0.00E+00	0.00E+00	5.45E-11	4.68E-14	3.82E-14	0.00E+00	0.00E+00	0.00E+00
I-134	2.66E-37	3.23E-39	1.28E-08	0.00E+00	0.00E+00	2.56E-12	1.43E-13	3.08E-14	0.00E+00	0.00E+00	0.00E+00
I-135	8.37E-37	1.02E-38	1.45E-08	0.00E+00	0.00E+00	1.43E-11	1.48E-13	2.35E-14	0.00E+00	0.00E+00	0.00E+00
ORGANIC											
I-131	5.24E-37	6.36E-39	7.80E-09	0.00E+00	0.00E+00	9.22E-11	1.66E-14	8.13E-15	0.00E+00	0.00E+00	0.00E+00
I-132	4.04E-37	4.91E-39	9.35E-09	0.00E+00	0.00E+00	3.99E-12	1.29E-13	2.22E-14	0.00E+00	0.00E+00	0.00E+00
I-133	8.77E-37	1.07E-38	1.37E-08	0.00E+00	0.00E+00	4.36E-11	3.74E-14	3.05E-14	0.00E+00	0.00E+00	0.00E+00
I-134	2.12E-37	2.58E-39	1.03E-08	0.00E+00	0.00E+00	2.05E-12	1.14E-13	2.47E-14	0.00E+00	0.00E+00	0.00E+00
I-135	6.70E-37	8.14E-39	1.16E-08	0.00E+00	0.00E+00	1.14E-11	1.18E-13	1.88E-14	0.00E+00	0.00E+00	0.00E+00
NOBLE GASES											
XE-131M	1.11E-35	1.35E-37	1.65E-07	0.00E+00	0.00E+00	0.00E+00	2.09E-14	1.18E-13	0.00E+00	0.00E+00	0.00E+00
XE-133M	5.63E-35	6.85E-37	8.51E-07	0.00E+00	0.00E+00	0.00E+00	1.61E-13	6.98E-13	0.00E+00	0.00E+00	0.00E+00
XE-133	2.34E-33	2.84E-35	3.49E-05	0.00E+00	0.00E+00	0.00E+00	6.03E-12	2.70E-11	0.00E+00	0.00E+00	0.00E+00
XE-135M	3.06E-36	3.72E-38	2.33E-06	0.00E+00	0.00E+00	0.00E+00	5.64E-12	1.19E-12	0.00E+00	0.00E+00	0.00E+00
XE-135	5.03E-34	6.11E-36	8.34E-06	0.00E+00	0.00E+00	0.00E+00	1.18E-11	1.42E-11	0.00E+00	0.00E+00	0.00E+00
XE-138	1.94E-35	2.36E-37	9.64E-06	0.00E+00	0.00E+00	0.00E+00	1.59E-10	4.08E-11	0.00E+00	0.00E+00	0.00E+00
KR-83M	2.84E-35	3.45E-37	7.27E-07	0.00E+00	0.00E+00	0.00E+00	2.09E-14	1.31E-13	0.00E+00	0.00E+00	0.00E+00
KR-85M	1.66E-34	2.02E-36	3.11E-06	0.00E+00	0.00E+00	0.00E+00	2.79E-12	3.83E-12	0.00E+00	0.00E+00	0.00E+00
KR-85	3.24E-35	3.94E-37	4.81E-07	0.00E+00	0.00E+00	0.00E+00	5.81E-15	5.67E-13	0.00E+00	0.00E+00	0.00E+00
KR-87	1.43E-34	1.74E-36	4.77E-06	0.00E+00	0.00E+00	0.00E+00	3.77E-11	2.65E-11	0.00E+00	0.00E+00	0.00E+00
KR-88	3.86E-34	4.69E-36	8.25E-06	0.00E+00	0.00E+00	0.00E+00	8.27E-11	1.49E-11	0.00E+00	0.00E+00	0.00E+00
						3.83E-09	3.16E-10	1.32E-10	0.00E+00	0.00E+00	0.00E+00
						4.69E+02	8.90E+01	2.95E+01	0.00E+00	0.00E+00	0.00E+00

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QDC CRDA, EAB, ALL REL GLAND: SIEMENS 60 GWD/MTU: 0 - 2 h

ISOTOPE	ACTIVITY RELEASED (CURIES)	
	2. HRS	
ELEMENTAL		
I-131	1.69E+03	1.69E+03
I-132	2.36E+03	2.36E+03
I-133	3.00E+03	3.00E+03
I-134	3.35E+03	3.35E+03
I-135	2.64E+03	2.64E+03
PARTICULATE		
I-131	9.29E+01	9.29E+01
I-132	1.30E+02	1.30E+02
I-133	1.65E+02	1.65E+02
I-134	1.84E+02	1.84E+02
I-135	1.45E+02	1.45E+02
ORGANIC		
I-131	7.43E+01	7.43E+01
I-132	1.04E+02	1.04E+02
I-133	1.32E+02	1.32E+02
I-134	1.47E+02	1.47E+02
I-135	1.16E+02	1.16E+02
NOBLE GASES		
XE-131M	1.57E+03	1.57E+03

XE-133M	8.14E+03	8.14E+03
XE-133	3.33E+05	3.33E+05
XE-135M	8.74E+04	8.74E+04
XE-135	8.25E+04	8.25E+04
XE-138	3.12E+05	3.12E+05
KR-83M	8.37E+03	8.37E+03
KR-85M	3.21E+04	3.21E+04
KR-85	4.57E+03	4.57E+03
KR-87	6.01E+04	6.01E+04
KR-88	8.92E+04	8.92E+04

END EXECUTION DATE: 11/18/1999
END EXECUTION TIME: 17:46:00.68