

LASALLE COUNTY STATION  
ANNUAL RADIOLOGICAL  
ENVIRONMENTAL OPERATING  
REPORT

1995

APRIL 1996

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## INTRODUCTION

LaSalle Station, a two-unit BWR station is located near Marseilles, Illinois, in LaSalle County, 3.5 miles south of the Illinois River. Each reactor is designed to have a capacity of 1078 MW net. Unit No. 1 loaded fuel in March 1982. Unit No. 2 loaded Fuel in late December 1983. The station has been designed to keep releases to the environment at levels below those specified in the regulations.

Liquid effluents from LaSalle County Station are released to the Illinois River in controlled batches after radioassay of each batch. Gaseous effluents are released to the atmosphere after delay to permit decay of short-lived (noble) gases. Releases to the atmosphere are calculated on the basis of analyses of routine grab samples of noble gases as well as continuously collected composite samples of iodine and particulate radioactivity sampled during the course of the year. The results of effluent analyses are summarized on a monthly basis and reported to the Nuclear Regulatory Commission as required per Technical Specifications/Standards. Airborne concentrations of noble gases, I-131, and particulate radioactivity in offsite areas are calculated using effluent and meteorological data.

Environmental monitoring is conducted by sampling at indicator and control (background) locations in the vicinity of the LaSalle County Station to measure changes in radiation or radioactivity levels that may be attributable to station operations. If significant changes attributable to LaSalle County Station are measured, these changes are correlated with effluent releases. External gamma radiation exposure from noble gases and internal dose from I-131 in milk are the most critical pathways at this site; however, an environmental monitoring program is conducted which includes these and many other pathways which are less significant in terms of radiation protection.

ComEd is in the process of implementing a Uniform Radiological Environmental Monitoring Program, referred to as UREMP, among the ComEd nuclear stations. This program includes generic requirements pertaining to environmental sampling and analysis, an annual land use census, an interlaboratory comparison program and environmental reports. LaSalle County Station implemented UREMP in October of 1995.



## SUMMARY

Gaseous and liquid effluents for the period contributed to only a small fraction of the LaSalle County Technical Specification/Standards limits. Calculations of environmental concentrations based on effluent, Illinois River flow, and meteorological data for the period indicate that consumption by the public of radionuclides attributable to LaSalle County Station does not exceed regulatory limits. Radiation exposure from radionuclides released to the atmosphere represented the critical pathway for the period with a maximum individual total dose estimated to be  $1.03\text{E-}05$  mrem for the year, where a shielding and occupancy factor of 0.7 is assumed. The assessment of radiation doses is performed in accordance with the ComEd Offsite Dose Calculation Manual (ODCM). The results of analysis confirm that the station is operating in compliance with 10CFR50 Appendix I, 10CFR20 and 40CFR190.

## 1.0 EFFLUENTS

### 1.1 Gaseous Effluents to the Atmosphere

Measured concentrations of noble gases, radioiodine, and particulate radioactivity released to the atmosphere during the year, are listed in Table 1.1-1. A total of 3.91 curies of fission and activation gases was released with a maximum quarterly average release rate of  $2.45\text{E-}01 \mu\text{Ci/sec}$ .

A total of  $4.46\text{E-}03$  curies of I-131 was released during the year, with a maximum quarterly average release rate of  $1.87\text{E-}04 \mu\text{Ci/sec}$  for all iodines.

A total of  $6.08\text{E-}03$  curies of beta-gamma emitters was released as airborne particulate matter with a maximum quarterly average release rate of  $3.69\text{E-}04 \mu\text{Ci/sec}$ . Alpha emitting radionuclides were not measurable.

A total of  $9.55\text{E+}01$  curies of tritium was released, with a maximum quarterly average release rate of  $4.48 \mu\text{Ci/sec}$ .

### 1.2 Liquids Released to Illinois River

No radioactive liquid waste was discharged from the station during 1995. Release estimates are given in Table 1.2-1.

## 2.0 SOLID RADIOACTIVE WASTE

Solid radioactive wastes were shipped by truck to Barnwell, South Carolina. The record of waste shipments is summarized in Table 2.0-1.

## 3.0 DOSE TO MAN

### 3.1 Gaseous Effluent Pathways

Table 3.1-1 summarizes the doses resulting from releases of airborne radioactivity via the different exposure pathways.

#### 3.1.1 Noble Gases

##### 3.1.1.1 Gamma Dose Rates

Offsite Gamma air and whole body dose rates are shown in Table 3.1-1 and were calculated based on measured release rates, isotopic composition of the noble gases, and average meteorological data for the period. Isodose contours based on concurrent meteorological data for gamma dose for the year are shown in Figure 3.1-1. Based on measured effluents and meteorological data, the maximum dose to an adult would be  $1.03\text{E-}05$  mrem for the year, with an occupancy or shielding factor of 0.7 included, and based on measured effluents and concurrent meteorological data would be  $1.10\text{E-}04$  mrem. The maximum gamma air dose was  $1.37\text{E-}05$  mrad, and  $1.55\text{E-}05$  mrad based on concurrent meteorological data.

### 3.1.1.2 Beta Air and Skin Rates

The range of beta particles in air is relatively small (on the order of a few meters or less); consequently, plumes of gaseous effluents may be considered "infinite" for the purpose of calculating the dose from beta radiation incident on the skin. However, the actual dose to sensitive skin tissues is difficult to calculate due to the effect of the beta particle energies, thickness of inert skin and clothing covering sensitive tissues. For purposes of this report the skin is taken to have a thickness of  $7.0 \text{ mg/cm}^2$  and an occupancy factor of 1.0 is used. The skin dose from beta and gamma radiation for the year was  $1.20\text{E-}05$  mrem. The maximum offsite beta air dose for the year was  $2.40\text{E-}06$  mrad.

The air concentrations of radioactive noble gases at the offsite receptor locations are given in Figure 3.1-2.

### 3.1.2 Radioactive Iodine

The human thyroid exhibits a significant capacity to concentrate ingested or inhaled iodine. The radioiodine, I-131, released during routine operation of the plant, may be made available to man resulting in a dose to the thyroid. The principal pathway of interest for this radionuclide is ingestion of radioiodine in milk by an infant.

#### 3.1.2.1 Iodine Concentrations in Air

The calculated concentration contours for iodine in air are shown in Figure 3.1-3. Included in these calculations is an iodine cloud depletion factor which accounts for the phenomenon of elemental iodine deposition on the ground. The maximum offsite concentration is estimated to be  $1.31\text{E-}04 \text{ pCi/m}^3$  for the year.

#### 3.1.2.2 Dose to Infant's Thyroid

The hypothetical thyroid dose to an infant living near the station via ingestion of milk was calculated. The radionuclide considered was I-131 and the source of milk was taken to be the nearest dairy farm with the cows pastured from May through October. The maximum infant's thyroid dose was  $1.63\text{E-}02$  mrem during the year (Table 3.1-1).

### 3.1.3 Concentrations of Particulates in Air

Concentration contours of radioactive airborne particulates are shown in Figure 3.1-4. The maximum offsite average level is estimated to be  $1.07\text{E-}05 \text{ pCi/m}^3$ .

## 3.2 Liquid Effluent Pathways

The three principal pathways through the aquatic environment for potential doses to man from liquid waste are ingestion of potable water, eating aquatic foods, and exposure while walking on the shoreline. Not all of these pathways are applicable at a given time or station but a reasonable approximation of the dose can be made by adjusting the dose formula for season of the year or type and degree of use of the

aquatic environment. NRC-developed equations\* were used to calculate the doses to the whole body, lower GI tracts, thyroid, bone, skin; specific parameters for use in the equations given in the ComEd Offsite Dose Calculation Manual. The maximum whole body dose for the year was 0.00E+00 mrem and no organ dose exceeded 0.00E+00 mrem (Table 3.2-1).

### 3.3 Assessment of Dose to Member of Public

During the period January to December, 1995, LaSalle County Station did not exceed these limits as shown in Table 3.1-1 and Table 3.2-1 (based on yearly average meteorological data), and as shown in Figure 3.1-1 (based on concurrent meteorological data), and as shown in Table 3.3-1:

- The RETS limits on dose or dose commitment to an individual due to radioactive materials in liquid effluents from each reactor unit (1.5 mrem to the whole body or 5 mrem to any organ during any calendar quarter; 3 mrem to the whole body or 10 mrem to any organ during any calendar year).
- The RETS limits on air dose in noble gases released in gaseous effluents to a member of the public from each reactor unit (5 mrad for gamma radiation or 10 mrad for beta radiation during any calendar quarter; 10 mrad for gamma radiation or 20 mrad for beta radiation during any calendar year).
- The RETS limits on dose to any individual due to iodine-131, iodine-133, tritium, and radionuclides in particulate form with half-lives greater than eight days in gaseous effluents released from each reactor unit (7.5 mrems to any organ during any calendar quarter; 15 mrems to any organ during any calendar year).
- The 10CFR20 limit on Total Effective Dose Equivalent to individual members of the public (100 mrem).

## 4.0 SITE METEOROLOGY

A summary of the site meteorological measurements taken during each calendar quarter of the year is given in Appendix II. The data are presented as cumulative joint frequency distributions of the wind direction for the 375' level and wind speed class by atmospheric stability class determined for the temperature difference between the 375' and 33' levels. Data recovery for these measurements was about 99.8% during 1995.

## 5.0 ENVIRONMENTAL MONITORING

Table 5.0-1 provides an outline of the Radiological Environmental Monitoring Program (REMP) as required in the current Technical Standards. Tables 5.0-2 lists the program's sampling locations, collection frequencies and analyses for all samples collected. Tables 5.0-3 to 5.0-6 summarize data for the year. Except for tables of special interest, tables listing all data are no longer included in the annual report. All data tables are available for inspection at the Station or in the Corporate Office.

\* Nuclear Regulatory Commission, Regulatory Guide 1.109 (Rev. 1).



Specific findings for various environmental media are discussed below.

### 5.1 Gamma Radiation

External radiation dose from onsite sources and noble gases released to the atmosphere was measured using  $\text{CaSO}_4:\text{Tm}$  thermoluminescent dosimeters (TLDs). Each location normally consists of 2 TLD sets. The quarterly average external radiation dose for the year was 16.2 mR at the indicator locations and 14.8 mR at the control locations. TLD results are listed in Table 5.1-1 and locations are shown in Figures 5.0-1 and 5.0-2.

Quarterly external radiation dose at fourteen air sampling locations averaged 15.3 mR and is similar to levels measured in 1986 (17.1 mR), 1987 (17.8 mR), 1988 (16.5 mR), 1989 (17.6 mR), 1990 (17.8 mR), 1991 (17.7 mR), 1992 (15.5 mR), 1993 (14.5 mR) and 1994 (15.4 mR). These differences are not statistically significant.

### 5.2 Airborne I-131 and Particulate Radioactivity

Locations of the samplers are shown in Figure 5.0-3. Airborne I-131 remained below the LLD of  $0.10 \text{ pCi/m}^3$  throughout the year.

Gross beta concentrations ranged from 0.008 to  $0.054 \text{ pCi/m}^3$  and averaged  $0.021 \text{ pCi/m}^3$  and is similar to levels measured in 1985 ( $0.025 \text{ pCi/m}^3$ ), 1986 ( $0.027 \text{ pCi/m}^3$ ), except for the period from May 16 through June 6 when it was influenced by the nuclear reactor accident at Chernobyl, 1987 ( $0.027 \text{ pCi/m}^3$ ), 1988 ( $0.031 \text{ pCi/m}^3$ ), 1989 ( $0.028 \text{ pCi/m}^3$ ), 1990 ( $0.024 \text{ pCi/m}^3$ ), and the same as in 1991 ( $0.022 \text{ pCi/m}^3$ ), 1992 ( $0.022 \text{ pCi/m}^3$ ), 1993 ( $0.022 \text{ pCi/m}^3$ ) and 1994 ( $0.022 \text{ pCi/m}^3$ ).

Gamma isotopic results were below the LLD level of  $0.01 \text{ pCi/m}^3$  in all quarterly composites.

No activity attributable to station operation was detected in any sample.

### 5.3 Aquatic Radioactivity

Well water was collected quarterly from one onsite well and five offsite wells and analyzed for tritium and gamma-emitting nuclides. All results were below the limits of detection, indicating that there was no measurable amount of radioactivity due to the Station's releases.

Weekly surface water samples from the Illinois River at Seneca and LSCS Cooling Lake were composited monthly and analyzed for gamma-emitting nuclides prior to implementing UREMP during October, 1995. Weekly samples from the same locations were composited quarterly and analyzed for tritium. None of the composited samples indicated the presence of gamma-emitting nuclides above their respective LLD levels. Tritium was detected in the quarterly upstream samples, Illinois River at Seneca, with a maximum first quarter concentration of  $370 \text{ pCi/L}$ . It is possible that the tritium is the result of upriver discharges from Dresden and Braidwood Stations.

In the LSCS Cooling Lake samples, tritium was detected in the second, third and fourth quarters at a maximum fourth quarter concentration of 383 pCi/L. It is possible that the tritium is the result of the Illinois River being the source of make-up water to the lake.

Sediment samples were collected twice a year from one indicator location (downstream of the Cooling Lake discharge structure) and analyzed for gamma-emitters prior to implementing UREMP during October, 1995. All gamma-emitters were below their respective detection limits in both samples. There are no adverse effects expected to the environment.

Levels of gamma radioactivity in fish were measured and found in all samples to be below the lower limit of detection for the program.

#### 5.4 Milk

Milk samples were collected monthly from November through April and biweekly from May through October and analyzed for Iodine-131 and gamma-emitting nuclides.

I-131 remained below the detection limits of 0.5 pCi/L.

Cs-134 and Cs-137 were below the LLD level of 10 pCi/L. All other gamma-emitting nuclides, except naturally-occurring K-40, were below their respective LLDs.

#### 5.5 Sample Collections

All samples were collected as scheduled except those listed in the Listing of Missed Samples, Appendix III.

#### 5.6 Program Modifications

In January, 1995, L-39 (Village View Acres Dairy) went out of business.

In June, 1995, L-38 (Picker Dairy Farm) went out of business and was replaced by L-41 (Burton Farm).

Implemented UREMP in October, 1995. Changes based on UREMP implementation are summarized as follows:

Deleted air sampling locations L-02, L-04, L-09, L-13 and L-14. Regrouped the remaining 9 air samplers into near field, far field and control.

Deleted Ground/Well locations L-29 (Seneca Well), L-30 (Ransom Well), L-31 (Ottawa Well) and L-32 (Illinois State Park).

Revised analysis of surface water samples to additionally perform gross beta on monthly composite. Deleted surface water sample location L-24 (Cooling Lake near recreation area) and added location L-40 (Illinois River Downstream).

Deleted sediment sample location L-34 (Downstream of Cooling Lake discharge structure at station) and added L-40 (Illinois River Downstream).

Deleted dairy locations L-19 (Bettenhausen Dairy) and L-20 (Gass Dairy).

Deleted fish location L-24 (LSCS Cooling Lake near recreation area) and added location L-36 (Illinois River upstream of discharge).

Added requirement for food product sampling and analysis.

#### 6.0 ANALYTICAL PROCEDURES

Procedures used during the period covered in this report remained essentially unchanged. A summary of the procedures used for analyzing radioactivity in environmental samples is given in Appendix VI of the report for the period January - December 1993.

#### 7.0 MILCH ANIMALS AND NEAREST LIVESTOCK CENSUS

A census of milch animals was conducted within a five mile radius of the station. The survey was conducted by "door-to-door" canvas by J. Benham on August 28, 1995. The nearest livestock census was conducted by J. Benham on August 28, 1995. The results of each census are presented in Appendix IV.

#### 8.0 NEAREST RESIDENT CENSUS

A census of the nearest residences within a five (5) mile radius was conducted by J. Benham on August 28, 1995.

Results of the nearest residence census are presented in Appendix IV.

#### 9.0 INTERLABORATORY COMPARISON PROGRAM RESULTS

Teledyne's Interlaboratory Comparison Program Results are presented in Appendix V.

ComEd's Thermoluminescent Dosimeter (TLD) Program is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) which requires review and evaluation. In addition to the biennial ANSI tested requirement, ComEd also tests to the ANSI standard during the non-NVLAP visitation year. ComEd additionally has an internal irradiation program that tests each of the six nuclear station TLD processors once per quarter. The results of all TLD performance tests are retained by ComEd's Corporate Health Physics Support Department.

#### 10.0 ERRATA DATA

In January, 1996, while turnover was being conducted between two computer programmers on the ODCM computer program, 5 of the 6 pathways used in the calculation of organ dose to verify compliance with 10CFR50 dose limits were found to be turned "off". It was determined that these pathways were "off" since January 1, 1994, when the computer program was updated to comply with the revision to 10CFR20. The pathway switches were immediately turned on and the organ doses for 1994 and 1995 were recalculated. Appendix VI contains the corrected organ dose data for 1994.

## APPENDIX I

### DATA TABLES AND FIGURES

\*



TABLE 1.1-1

LASALLE COUNTY NUCLEAR POWER STATION  
UNITS ONE AND TWO  
DOCKET NUMBERS 50-373 AND 50-374

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1995)

GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

			<u>First Quarter</u>	<u>Second Quarter</u>	<u>Estimated Total Error %</u>
A.	Fission and Activation Gases				
1.	Total release	Ci	1.02E-03	2.05E-02	30%
2.	Average release rate for period	uCi/sec	1.31E-04	2.61E-03	
B.	Iodines				
1.	Total iodine-131	Ci	4.23E-04	4.51E-04	31%
2.	Average release rate for period	uCi/sec	5.44E-05	5.74E-05	
C.	Particulates				
1.	Particulates with T1/2 >8 days	Ci	<1.00E-11	1.58E-04	29%
2.	Average release rate for period	uCi/sec	<1.00E-11	2.01E-05	
3.	Gross alpha radioactivity (estimate)	Ci	<1.00E-11	<1.00E-11	
D.	Tritium				
1.	Total release	Ci	3.48E+01	2.68E+01	19%
2.	Average release rate for period	uCi/sec	4.48E+00	3.41E+00	

"<" indicates activity of sample is less than LLD given in uCi/ml

			<u>Third Quarter</u>	<u>Fourth Quarter</u>	<u>Estimated Total Error %</u>
A.	Fission and Activation Gases				
1.	Total release	Ci	3.89E+00	5.60E-04	33%
2.	Average release rate for period	uCi/sec	2.45E-01	3.52E-05	
B.	Iodines				
1.	Total iodine-131	Ci	2.97E-03	6.16E-04	35%
2.	Average release rate for period	uCi/sec	1.87E-04	3.87E-05	
C.	Particulates				
1.	Particulates with T1/2 >8 days	Ci	5.21E-05	5.87E-03	29%
2.	Average release rate for period	uCi/sec	3.28E-06	3.69E-04	
3.	Gross alpha radioactivity (estimate)	Ci	<1.00E-11	<1.00E-11	
D.	Tritium				
1.	Total release	Ci	2.17E+01	3.37E+01	17%
2.	Average release rate for period	uCi/sec	1.37E+00	2.19E+00	

"<" indicates activity of sample is less than LLD given in uCi/ml

TABLE 1.2-1

## EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1995)

## UNIT ONE

## LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

			<u>First Quarter</u>	<u>Second Quarter</u>	<u>ESTIMATED TOTAL ERROR%</u>
A.	Fission and Activation Products				
1.	Total release (not including tritium, gases, alpha)	Ci	0.00E+00	0.00E+00	
2.	Average concentration released	uCi/ml	N/A	N/A	
3.	Maximum concentration released	uCi/ml	N/A	N/A	
B.	Tritium				
1.	Total release	Ci	0.00E+00	0.00E+00	
2.	Average concentration released	uCi/ml	N/A	N/A	
C.	Dissolved Noble Gases				
1.	Total release	Ci	0.00E+00	0.00E+00	
2.	Average concentration released	uCi/ml	N/A	N/A	
D.	Gross Alpha Radioactivity				
1.	Total release	Ci	0.00E+00	0.00E+00	
2.	Average concentration released	uCi/ml	N/A	N/A	
E.	Volume of Waste Released (prior to dilution)	liters	0.00E+00	0.00E+00	
F.	Volume of Dilution Water	liters	0.00E+00	0.00E+00	
			<u>Third Quarter</u>	<u>Forth Quarter</u>	<u>ESTIMATED TOTAL ERROR%</u>
A.	Fission and Activation Products				
1.	Total release (not including tritium, gases, alpha)	Ci	0.00E+00	0.00E+00	
2.	Average concentration released	uCi/ml	N/A	N/A	
3.	Maximum concentration released	uCi/ml	N/A	N/A	
B.	Tritium				
1.	Total release	Ci	0.00E+00	0.00E+00	
2.	Average concentration released	uCi/ml	N/A	N/A	
C.	Dissolved Noble Gases				
1.	Total release	Ci	0.00E+00	0.00E+00	
2.	Average concentration released	uCi/ml	N/A	N/A	
D.	Gross Alpha Radioactivity				
1.	Total release	Ci	0.00E+00	0.00E+00	
2.	Average concentration released	uCi/ml	N/A	N/A	
E.	Volume of Waste Released (prior to dilution)	liters	0.00E+00	0.00E+00	
F.	Volume of Dilution Water	liters	0.00E+00	0.00E+00	

TABLE 1.2-1 (continued)

## EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1995)

## UNIT TWO

## LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

			<u>First Quarter</u>	<u>Second Quarter</u>
A.	Fission and Activation Products			
1.	Total release (not including tritium, gases, alpha)	Ci	0.00E+00	0.00E+00
2.	Average concentration released	uCi/ml	N/A	N/A
3.	Maximum concentration released	uCi/ml	N/A	N/A
B.	Tritium			
1.	Total release	Ci	0.00E+00	0.00E+00
2.	Average concentration released	uCi/ml	N/A	N/A
C.	Dissolved Noble Gases			
1.	Total release	Ci	0.00E+00	0.00E+00
2.	Average concentration released	uCi/ml	N/A	N/A
D.	Gross Alpha Radioactivity			
1.	Total release	Ci	0.00E+00	0.00E+00
2.	Average concentration released	uCi/ml	N/A	N/A
E.	Volume of Waste Released	liters	0.00E+00	0.00E+00
F.	Volume of Dilution Water	liters	0.00E+00	0.00E+00
			<u>Third Quarter</u>	<u>Forth Quarter</u>
A.	Fission and Activation Products			
1.	Total release (not including tritium, gases, alpha)	Ci	0.00E+00	0.00E+00
2.	Average concentration released	uCi/ml	N/A	N/A
3.	Maximum concentration released	uCi/ml	N/A	N/A
B.	Tritium			
1.	Total release	Ci	0.00E+00	0.00E+00
2.	Average concentration released	uCi/ml	N/A	N/A
C.	Dissolved Noble Gases			
1.	Total release	Ci	0.00E+00	0.00E+00
2.	Average concentration released	uCi/ml	N/A	N/A
D.	Gross Alpha Radioactivity			
1.	Total release	Ci	0.00E+00	0.00E+00
2.	Average concentration released	uCi/ml	N/A	N/A
E.	Volume of Waste Released	liters	0.00E+00	0.00E+00
F.	Volume of Dilution Water	liters	0.00E+00	0.00E+00

TABLE 2.0-1

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1995)  
SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL

		<u>January</u>	<u>February</u>	<u>March</u>	<u>First Quarter</u>
1.	Spent resins; filter sludges, evaporator bottoms, etc.	NO SHIPMENTS	NO SHIPMENTS	NO SHIPMENTS	N/A
	a. Quantity shipped cu.m.				
	b. Total activity Ci				
	c. Major nuclides (estimate %)				
	d. Container type				
	e. Container volume cu.m.				
	f. Solidification agent				
2.	Dry compressible waste, contaminated equipment, etc.				
	a. Quantity shipped cu.m.				
	b. Total activity Ci				
	c. Major nuclides (estimate %)				
	d. Container type				
	e. Container volume cu.m.				
3.	Other	<u>January</u>	<u>February</u>	<u>March</u>	<u>First Quarter</u>
	a. Quantity shipped cu.m.	NO SHIPMENTS	NO SHIPMENTS	NO SHIPMENTS	N/A
	b. Total activity Ci				
	c. Major nuclides (estimate %)				
	d. Container type				
	e. Container volume cu.m.				
4.	Irradiated Components				
	a. Number of shipments				
	b. Mode of Transportation				
	c. Destination				
5.	Solid Waste Disposition				
	a. Number of Shipments				
	b. Mode of Transportation				
	c. Destination				



TABLE 2.0-1 (continued)

## EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1995)

## SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL

	<u>April</u>	<u>May</u>	<u>June</u>	<u>Second Quarter</u>
1. Spent resins, filter sludges, evaporator bottoms, etc.	NO SHIPMENTS	NO SHIPMENTS	NO SHIPMENTS	N/A
a. Quantity shipped cu.m.				
b. Total activity Ci				
c. Major nuclides				
d. Container type				
e. Container volume cu.m.				
f. Solidification agent				
2. Dry compressible waste, contaminated equipment, etc.				
a. Quantity shipped cu.m.				
b. Total activity Ci				
c. Major nuclides (estimate %)				
d. Container type				
e. Container volume cu.m.				
3. Other	<u>April</u>	<u>May</u>	<u>June</u>	<u>Second Quarter</u>
a. Quantity shipped cu.m.	NO SHIPMENTS	NO SHIPMENTS	NO SHIPMENTS	N/A
b. Total activity Ci				
c. Major nuclides (estimate %)				
d. Container type				
e. Container volume cu.m.				
4. Irradiated Components				
a. Number of shipments				
b. Mode of Transportation				
c. Destination				
5. Solid Waste Disposition				
a. Number of Shipments				
b. Mode of Transportation				
c. Destination				

TABLE 2.0-1 (continued)

## EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1995)

## SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL

		<u>July</u>	<u>August</u>	<u>September</u>	<u>Third Quarter</u>
1.	Spent resins, filter sludges, evaporator bottoms, etc.				
a.	Quantity shipped cu.m.	0.00E+00	1.93E+01	3.62E+01	5.55E+01
b.	Total activity Ci	0.00E+00	1.15E+02	1.60E+02	2.75E+02
c.	Major nuclides (estimate %)				
	Mn-54 %	0	23	23	
	Fe-55 %	0	1.24	1.24	
	Co-58 %	0	9.62	9.62	
	Co-60 %	0	65.20	65.20	
d.	Container type	N/A	LSA	LSA	
e.	Container volume cu.m.	N/A	4.83E+00	2.36E+00 4.83E+00	
f.	Solidification agent	N/A	Cement	Cement	
2.	Dry compressible waste, contaminated equipment, etc.				
a.	Quantity shipped cu.m.	0.00E+00	0.00E+00	0.00E+00	0.00E+00
b.	Total activity Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
c.	Major nuclides (estimate %)				
	Cr-51 %	0	0	0	
	Mn-54 %	0	0	0	
	Fe-55 %	0	0	0	
	Co-59 %	0	0	0	
	Co-60 %	0	0	0	
d.	Container type	N/A	N/A	N/A	
e.	Container volume cu.m.	N/A	N/A	N/A	

TABLE 2.0-1 (continued)

## EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1995)

## SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL

		<u>July</u>	<u>August</u>	<u>September</u>	<u>Third Quarter</u>
3.	Other				
a.	Quantity shipped cu.m.	0.00E+00	0.00E+00 <sup>1</sup>	0.00E+00	0.00E+00
b.	Total activity Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
c.	Major nuclides (estimate %)				
	Cr-51 %	0	0	0	
	Mn-54 %	0	0	0	
	Fe-55 %	0	0	0	
	Co-59 %	0	0	0	
	Co-60 %	0	0	0	
d.	Container type	N/A	N/A	N/A	
e.	Container volume cu.m.	N/A	N/A	N/A	
4.	Irradiated Components				
a.	Number of shipments	0	0	0	0
b.	Mode of Transportation	N/A	N/A	N/A	
c.	Destination	N/A	N/A	N/A	
5.	Solid Waste Disposition				
a.	Number of Shipments	0	4	8	24
b.	Mode of Transportation		Truck	Truck	
	Number	N/A	4	8	
c.	Destination	N/A	Barnwell	Barnwell	
	Number	0	4	8	

TABLE 2.0-1 (continued)

EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1995)  
 SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL

		<u>October</u>	<u>November</u>	<u>December</u>	<u>Forth Quarter</u>
1.	Spent resins, filter sludges, evaporator bottoms, etc.				
a.	Quantity shipped cu.m.	6.52E+02	9.86E+01	3.86E+01	7.89E+02
b.	Total activity Ci	1.03E+02	1.21E+02	7.96E+02	1.02E+03
c.	Major nuclides (estimate %)				
	Mn-54 %	23	23	23	
	Fe-55 %	1.24	1.24	1.24	
	Co-58 %	9.62	9.62	9.62	
	Co-60 %	65.2	65.2	65.2	
d.	Container type	LSA	LSA	LSA	
e.	Container volume cu.m.	4.83E+00 2.36E+00	4.83E+00 3.40E+00	4.83E+00	
f.	Solidification agent	Cement	Cement	Cement	
2.	Dry compressible waste, contaminated equipment, etc.				
a.	Quantity shipped cu.m.	0.00E+00	0.00E+00	9.66E+00	9.66E+00
b.	Total activity Ci	0.00E+00	0.00E+00	1.02E+01	1.02E+01
c.	Major nuclides (estimate %)				
	Mn-54 %	0	0	4.28	
	Fe-55 %	0	0	22.8	
	Co-59 %	0	0	0.05	
	Co-60 %	0	0	7.08	
d.	Container type	N/A	N/A	LSA	
e.	Container volume cu.m.	N/A	N/A	4.83E+00	



TABLE 2.0-1 (continued)

## EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT (1995)

## SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL

		<u>October</u>	<u>November</u>	<u>December</u>	<u>Forth Quarter</u>
3.	Other				
a.	Quantity shipped cu.m.	0.00E+00	0.00E+00	0.00E+00	0.00E+00
b.	Total activity Ci	0.00E+00	0.00E+00	0.00E+00	0.00E+00
c.	Major nuclides (estimate %)				
	Cr-51 %	0	0	0	
	Mn-54 %	0	0	0	
	Fe-55 %	0	0	0	
	Co-59 %	0	0	0	
	Co-60 %	0	0	0	
d.	Container type	N/A	N/A	N/A	
e.	Container volume cu.m.	N/A	N/A	N/A	
4.	Irradiated Components				
a.	Number of shipments	0	0	0	0
b.	Mode of Transportation	N/A	N/A	N/A	
c.	Destination	N/A	N/A	N/A	
5.	Solid Waste Disposition				
a.	Number of Shipments	14	21	10	45
b.	Mode of Transportation	Truck	Truck	Truck	
	Number	14	21	10	
c.	Destination	Barnwell	Barnwell	Barnwell	
	Number	14	21	10	
	Estimated total error % for spent resins, filter sludges, evaporator bottoms, etc. (July-Dec)				12%
	Estimated total error % for dry compressible waste, contaminated equipment, etc. (July-Dec)				14%

Estimated Cumulative Gamma Dose (in mrem)  
from the LaSalle Station for the period  
January-December 1995

Small figure - multiply by  $10^{-7}$   
Large figure - multiply by  $10^{-7}$



FIGURE 3.1-2

Estimated Total Concentrations (in pCi/m<sup>3</sup>)  
of Noble Gases from the LaSalle Station  
for the period January-December 1995

Isopleth Labels

Small figure - multiply by 10<sup>-4</sup>

Large figure - multiply by 10<sup>-4</sup>

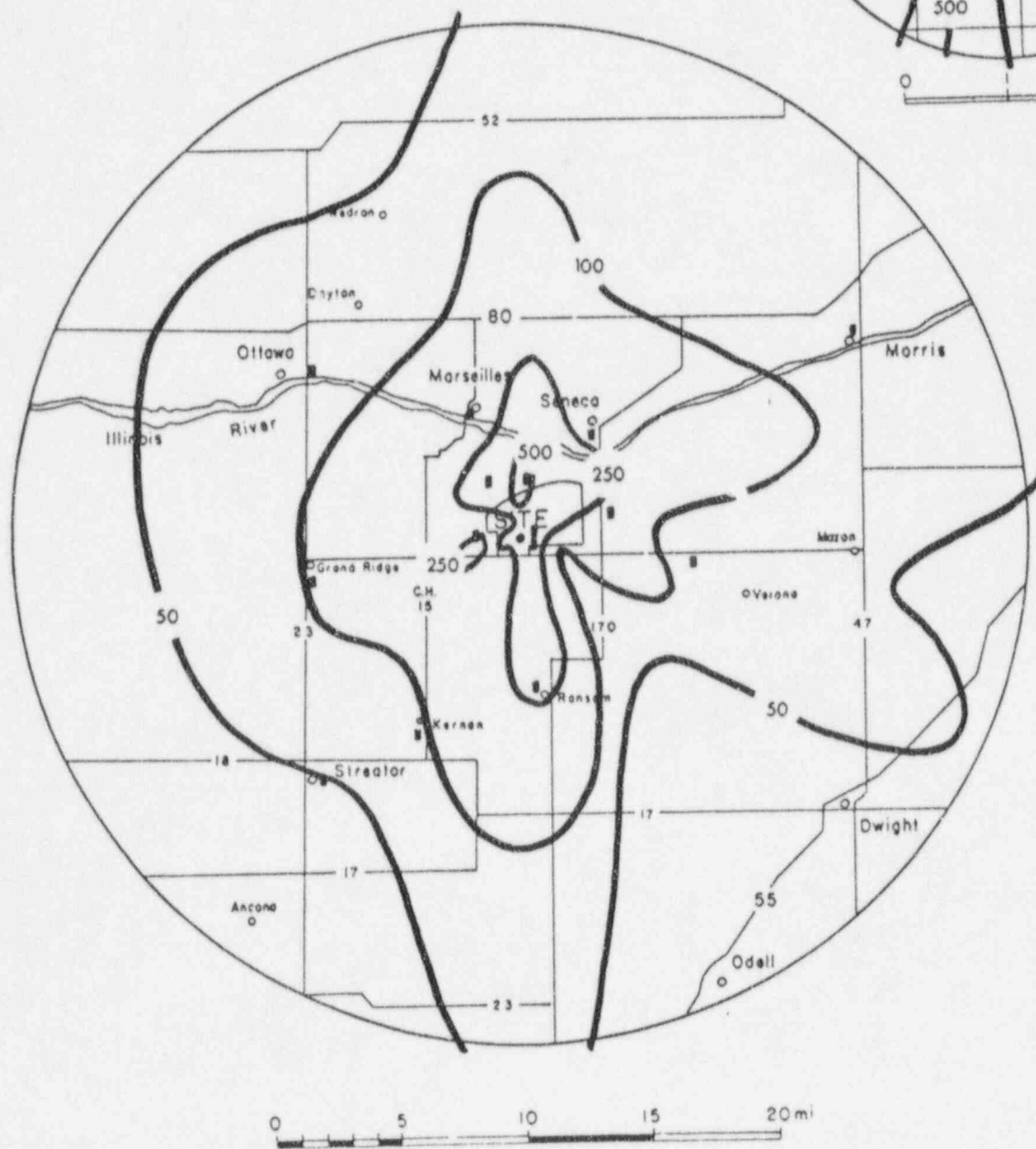


FIGURE 3.1-3

Estimated Total Concentrations (in pCi/m<sup>3</sup>)  
of Iodines from the LaSalle Station for  
the period January-December 1995

Isopleth Labels

Small figure - multiply by 10<sup>-6</sup>

Large figure - multiply by 10<sup>-6</sup>

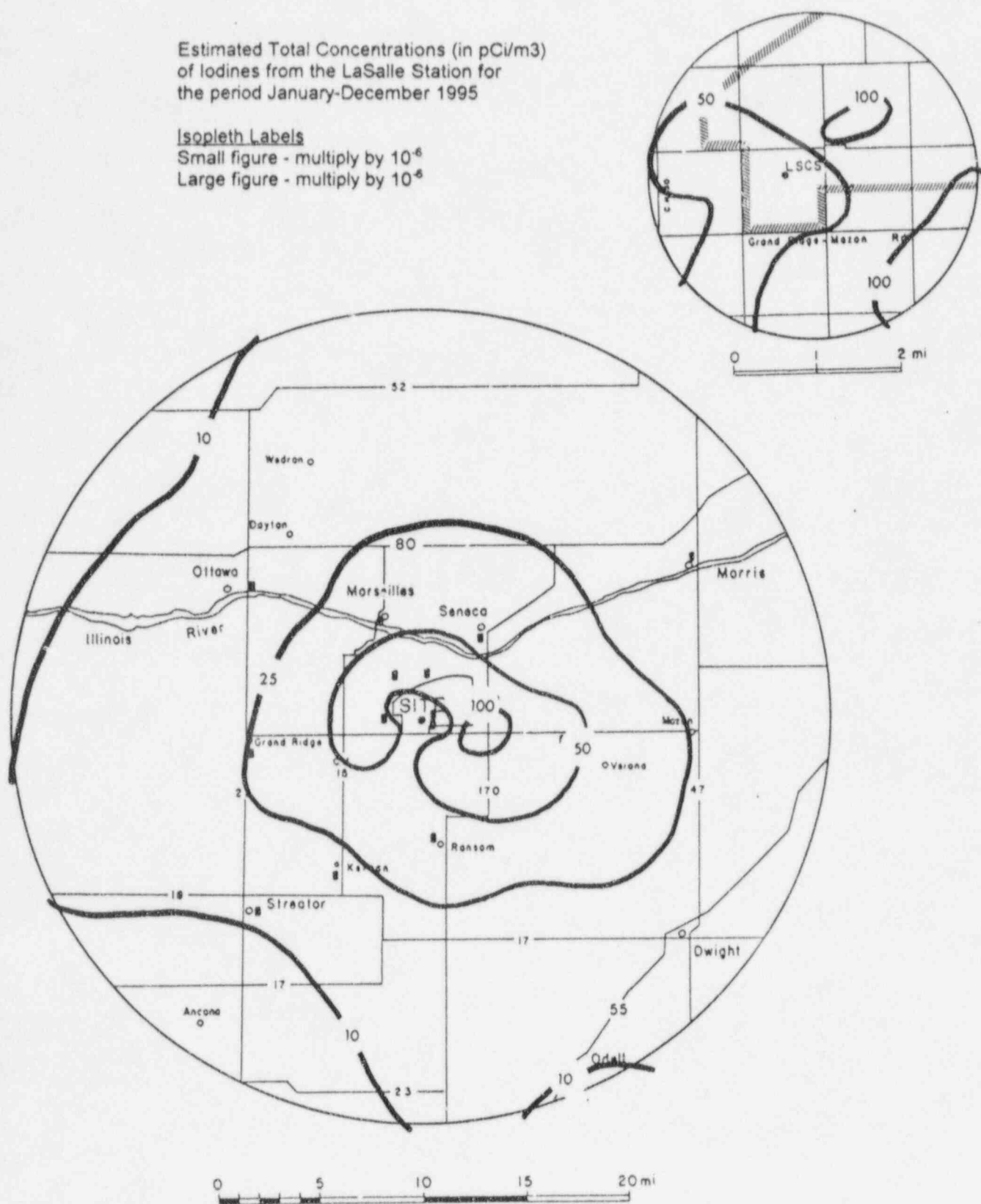


FIGURE 3.1-4

Estimated Total Concentrations (in  $\mu\text{Ci}/\text{m}^3$ )  
of Particulates from the LaSalle Station  
for the period January-December 1995

Isopleth Labels

Small figure - multiply by  $10^{-7}$

Large figure - multiply by  $10^{-7}$

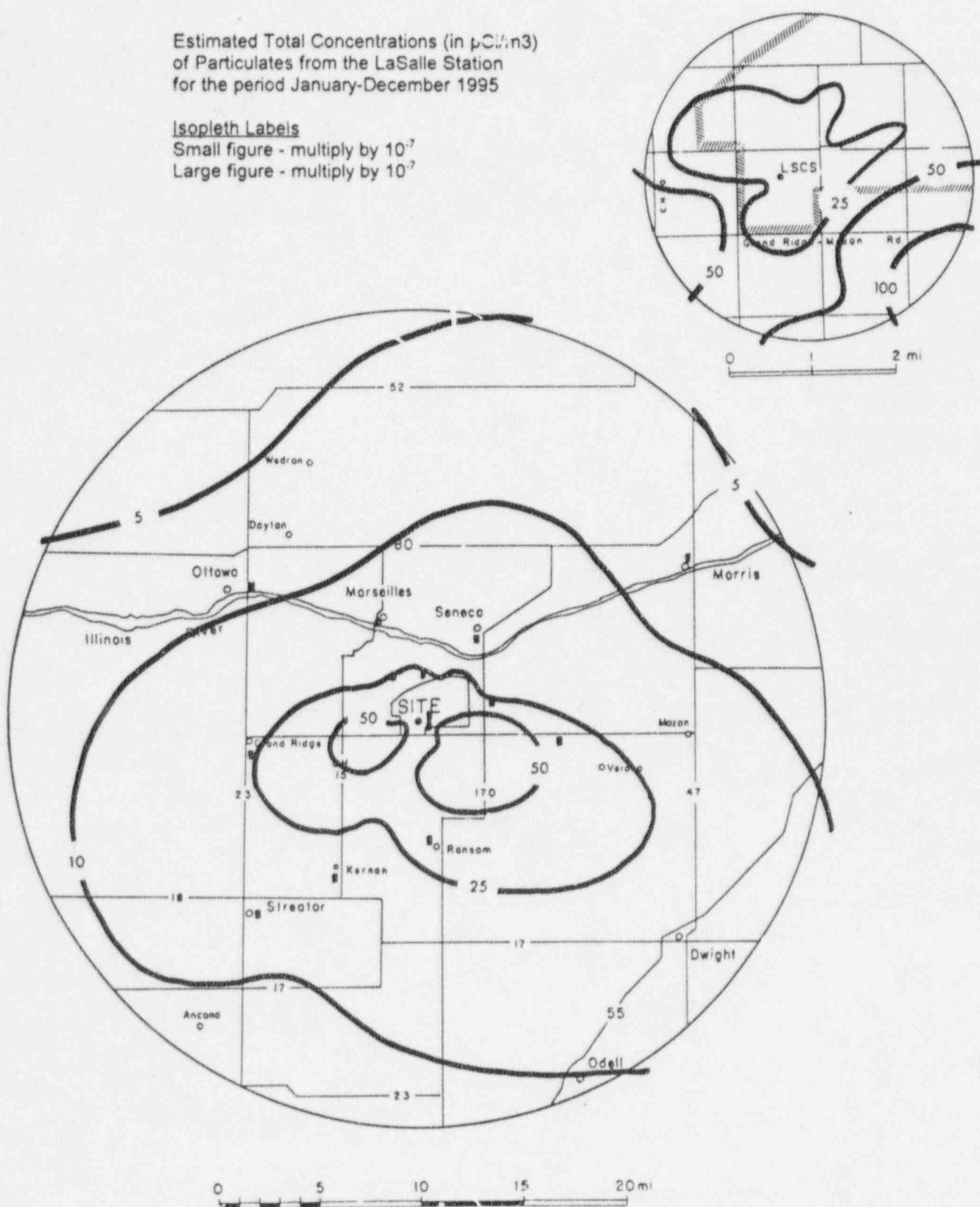




TABLE 3.1-1

## LASALLE STATION UNIT ONE

ACTUAL 1995

MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES

PERIOD OF RELEASE - 01/01/95 TO 12/31/95 CALCULATED 03/11/96

INFANT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	5.04E-09 (WSW )	2.79E-09 (WSW )	1.37E-05 (WSW )	6.39E-09 (WSW )	1.37E-05 (WSW )
BETA AIR (MRAD)	4.76E-10 (ESE )	8.35E-09 (ESE )	2.40E-06 (ESE )	3.86E-10 (ESE )	2.41E-06 (ESE )
TOT. BODY (MREM)	3.79E-09 (WSW )	2.10E-09 (WSW )	1.03E-05 (WSW )	4.81E-09 (WSW )	1.03E-05 (WSW )
SKIN (MREM)	4.15E-09 (WSW )	6.34E-09 (ESE )	1.20E-05 (WSW )	5.19E-09 (WSW )	1.20E-05 (WSW )
ORGAN (MREM)	3.06E-03 (ESE )	2.48E-03 (ESE )	7.28E-03 (ESE )	3.45E-03 (ESE )	1.63E-02 (ESE )

THIS IS A REPORT FOR THE CALENDAR YEAR 1995

THYROID      THYROID      THYROID      THYROID      THYROID

COMPLIANCE STATUS - 10CFR 50 APP. I  
INFANT RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.04	0.03	0.10	0.05	15.0	0.11

THYROID      THYROID      THYROID      THYROID      THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 1.7 SEPTEMBER 1995  
ODCM SOFTWARE VERSION 1.1 January 1995  
ODCM DATABASE VERSION 1.1 January 1995

TABLE 3.1-1 (continued)

## LASALLE STATION UNIT ONE

ACTUAL 1995

MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES

PERIOD OF RELEASE - 01/01/95 TO 12/31/95 CALCULATED 03/11/96

CHILD RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	5.04E-09	2.79E-09	1.37E-05	6.39E-09	1.37E-05
(MRAD)	(WSW )	(WSW )	(WSW )	(WSW )	(WSW )
BETA AIR	4.76E-10	8.35E-09	2.40E-06	3.86E-10	2.41E-06
(MRAD)	(ESE )	(ESE )	(ESE )	(ESE )	(ESE )
TOT. BODY	3.79E-09	2.10E-09	1.03E-05	4.81E-09	1.03E-05
(MREM)	(WSW )	(WSW )	(WSW )	(WSW )	(WSW )
SKIN	4.15E-09	6.34E-09	1.20E-05	5.19E-09	1.20E-05
(MREM)	(WSW )	(ESE )	(WSW )	(WSW )	(WSW )
ORGAN	2.49E-03	1.09E-02	3.91E-02	9.82E-03	6.22E-02
(MREM)	(NNE )	(NNE )	(NNE )	(NNE )	(NNE )

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THIS IS A REPORT FOR THE CALENDAR YEAR 1995

COMPLIANCE STATUS - 10CFR 50 APP. I  
CHILD RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.03	0.15	0.52	0.13	15.0	0.41

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RESULTS BASED UPON: ODCM ANNEX REVISION 1.7 SEPTEMBER 1995  
ODCM SOFTWARE VERSION 1.1 January 1995  
ODCM DATABASE VERSION 1.1 January 1995

TABLE 3.1-1 (continued)

## LASALLE STATION UNIT ONE

ACTUAL 1995

MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES

PERIOD OF RELEASE - 01/01/95 TO 12/31/95    CALCULATED 03/11/96  
TEENAGER RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	5.04E-09	2.79E-09	1.37E-05	6.39E-09	1.37E-05
(MRAD)	(WSW )	(WSW )	(WSW )	(WSW )	(WSW )
BETA AIR	4.76E-10	8.35E-09	2.40E-06	3.86E-10	2.41E-06
(MRAD)	(ESE )	(ESE )	(ESE )	(ESE )	(ESE )
TOT. BODY	3.79E-09	2.10E-09	1.03E-05	4.81E-09	1.03E-05
(MREM)	(WSW )	(WSW )	(WSW )	(WSW )	(WSW )
SKIN	4.15E-09	6.34E-09	1.20E-05	5.19E-09	1.20E-05
(MREM)	(WSW )	(ESE )	(WSW )	(WSW )	(WSW )
ORGAN	1.75E-03	7.18E-03	2.55E-02	6.48E-03	4.09E-02
(MREM)	(NNE )	(NNE )	(NNE )	(NNE )	(NNE )

                  THYROID    GI\_LLI    THYROID    THYROID    THYROID  
THIS IS A REPORT FOR THE CALENDAR YEAR 1995

COMPLIANCE STATUS - 10CFR 50 APP. I  
TEENAGER RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.02	0.10	0.34	0.09	15.0	0.27

                  THYROID    GI\_LLI    THYROID    THYROID    THYROID

RESULTS BASED UPON:    ODCM ANNEX REVISION    1.7 SEPTEMBER 1995  
                          ODCM SOFTWARE VERSION 1.1 January 1995  
                          ODCM DATABASE VERSION 1.1 January 1995

# TAELE 3.1-1 (continued)

## LASALLE STATION UNIT ONE

ACTUAL 1995

MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES

PERIOD OF RELEASE - 01/01/95 TO 12/31/95 CALCULATED 03/11/96

ADULT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	5.04E-09	2.79E-09	1.37E-05	6.39E-09	1.37E-05
(MRAD)	(WSW )	(WSW )	(WSW )	(WSW )	(WSW )
BETA AIR	4.76E-10	8.35E-09	2.40E-06	3.86E-10	2.41E-06
(MRAD)	(ESE )	(ESE )	(ESE )	(ESE )	(ESE )
TOT. BODY	3.79E-09	2.10E-09	1.03E-05	4.81E-09	1.03E-05
(MREM)	(WSW )	(WSW )	(WSW )	(WSW )	(WSW )
SKIN	4.15E-09	6.34E-09	1.20E-05	5.19E-09	1.20E-05
(MREM)	(WSW )	(ESE )	(WSW )	(WSW )	(WSW )
ORGAN	2.01E-03	6.66E-03	2.34E-02	6.18E-03	3.83E-02
(MREM)	(NNE )	(NNE )	(NNE )	(NNE )	(NNE )

THYROID GI\_LLI THYROID THYROID THYROID  
THIS IS A REPORT FOR THE CALENDAR YEAR 1995

## COMPLIANCE STATUS - 10CFR 50 APP. I ADULT RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.03	0.09	0.31	0.08	15.0	0.26

THYROID GI\_LLI THYROID THYROID THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 1.7 SEPTEMBER 1995  
ODCM SOFTWARE VERSION 1.1 January 1995  
ODCM DATABASE VERSION 1.1 January 1995

TABLE 3.2-1

## LASALLE STATION UNIT ONE

ACTUAL 1995

MAXIMUM DOSES RESULTING FROM AQUATIC RELEASES

PERIOD OF RELEASE - 01/01/95 TO 12/31/95 CALCULATED 03/11/96

ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL*
TOTAL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BODY					
INTERNAL	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ORGAN					
	GI_LLI	LIVER	GI_LLI	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 1995

## COMPLIANCE STATUS - 10 CFR 50 APP. I

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
TOTAL BODY (MREM)	1.5	0.00	0.00	0.00	0.00	3.0	0.00
CRIT. ORGAN (MREM)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
		GI_LLI	LIVER	GI_LLI	GI_LLI		GI_LLI

RESULTS BASED UPON:

ODCM ANNEX REVISION 1.7 SEPTEMBER 1995

ODCM SOFTWARE VERSION 1.1 January 1995

ODCM DATABASE VERSION 1.1 January 1995

\* There were no liquid releases from LaSalle County Station during 1995.



TABLE 3.3-1

LASALLE STATION UNIT ONE  
 10 CFR 20 COMPLIANCE ASSESSMENT  
 PERIOD OF ASSESSMENT 01/01/95 TO 12/31/95  
 CALCULATED 01/27/96

## 1. 10 CFR 20.1301 (a)(1) Compliance

Total Effective Dose Equivalent, mrem/yr	2.75E-01
10 CFR 20.1301 (a)(1) limit mrem/yr	100.0
% of limit	0.27

## Compliance Summary - 10CFR20

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	% of Limit
TEDE	7.18E-02	5.68E-02	7.74E-02	6.89E-02	0.27

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

TABLE 3.3-1 (continued)

## LASALLE STATION UNIT ONE

## 10 CFR 20 COMPLIANCE ASSESSMENT

PERIOD OF ASSESSMENT 01/01/95 TO 12/31/95

CALCULATED 01/27/96

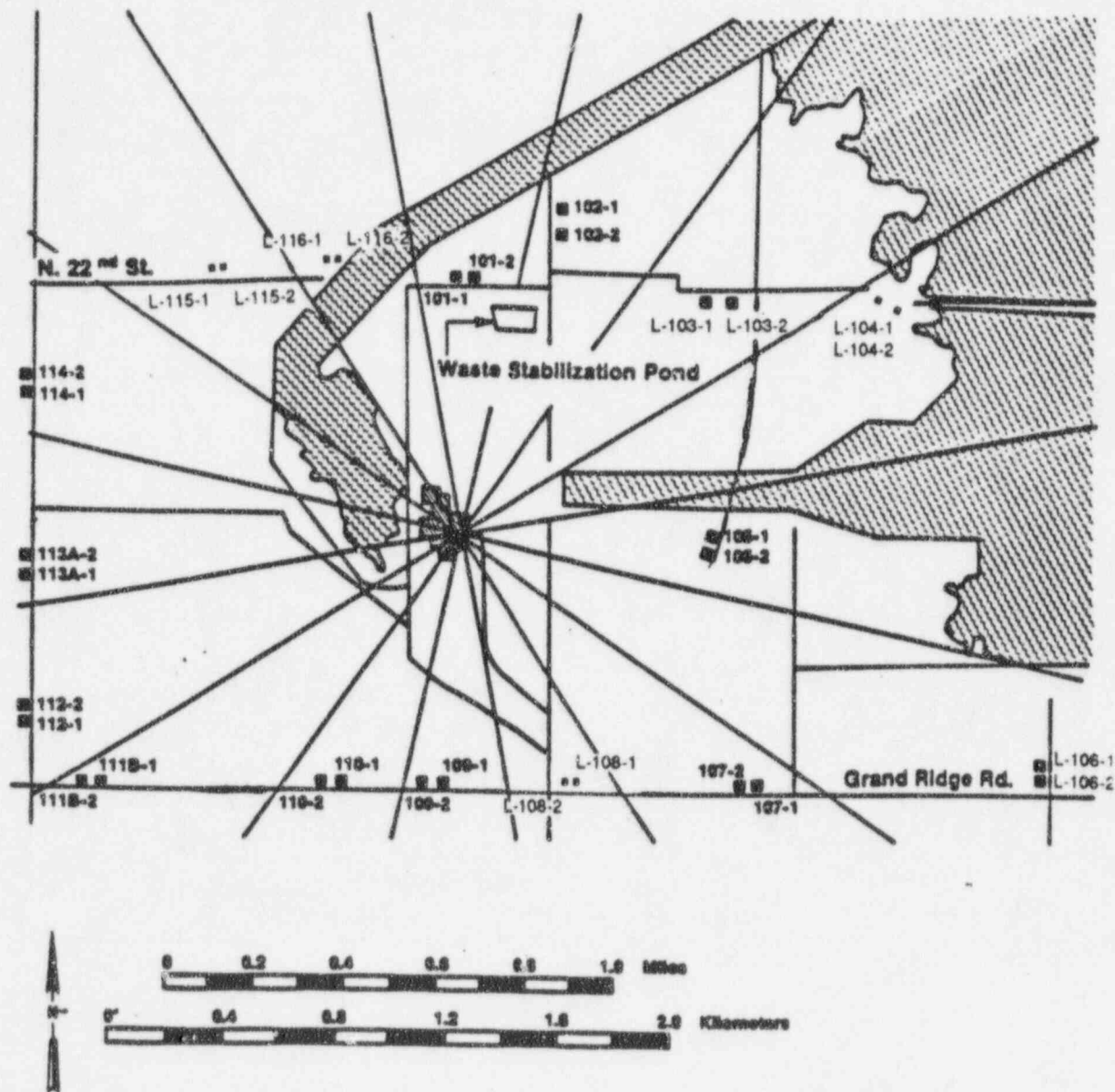
## 2. 10 CFR 20.1301 (d)/40 CFR 190 Compliance

		Dose (mrem)	Limit (mrem)	% of Limit
Whole Body (DDE)	Plume	1.03E-05		
	Skyshine	2.51E-01		
	Ground	2.10E-04		
	Total	2.51E-01	25.0	1.01
Organ Dose (CDE)	Thyroid	2.40E-02	75.0	0.03
	Gonads	2.35E-02	25.0	0.09
	Breast	2.35E-02	25.0	0.09
	Lung	2.35E-02	25.0	0.09
	Marrow	2.35E-02	25.0	0.09
	Bone	2.35E-02	25.0	0.09
	Remainder	2.35E-02	25.0	0.09
	CEDE	2.35E-02		
	TEDE	2.75E-01	100.0	0.27

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

FIGURE 5.0-1

Revision 1.1  
July 1994



■ TLD Location

LASALLE COUNTY STATION

INNER RING TLD LOCATIONS

FIGURE 5.0-2

Revision 1.1  
July 1994

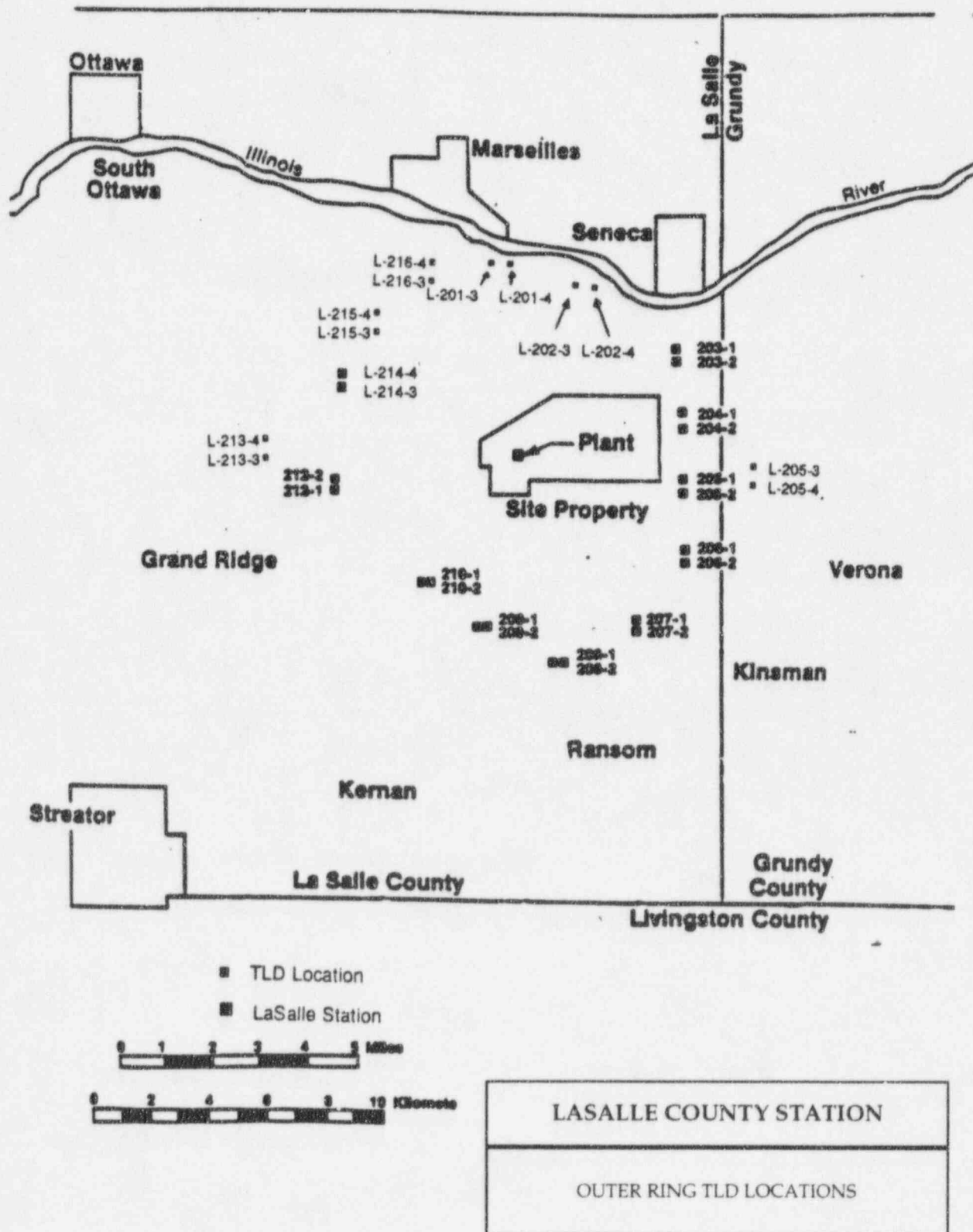
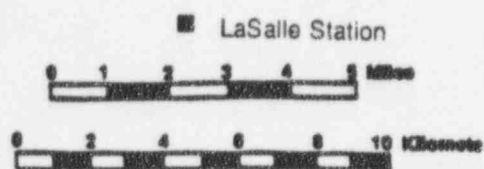
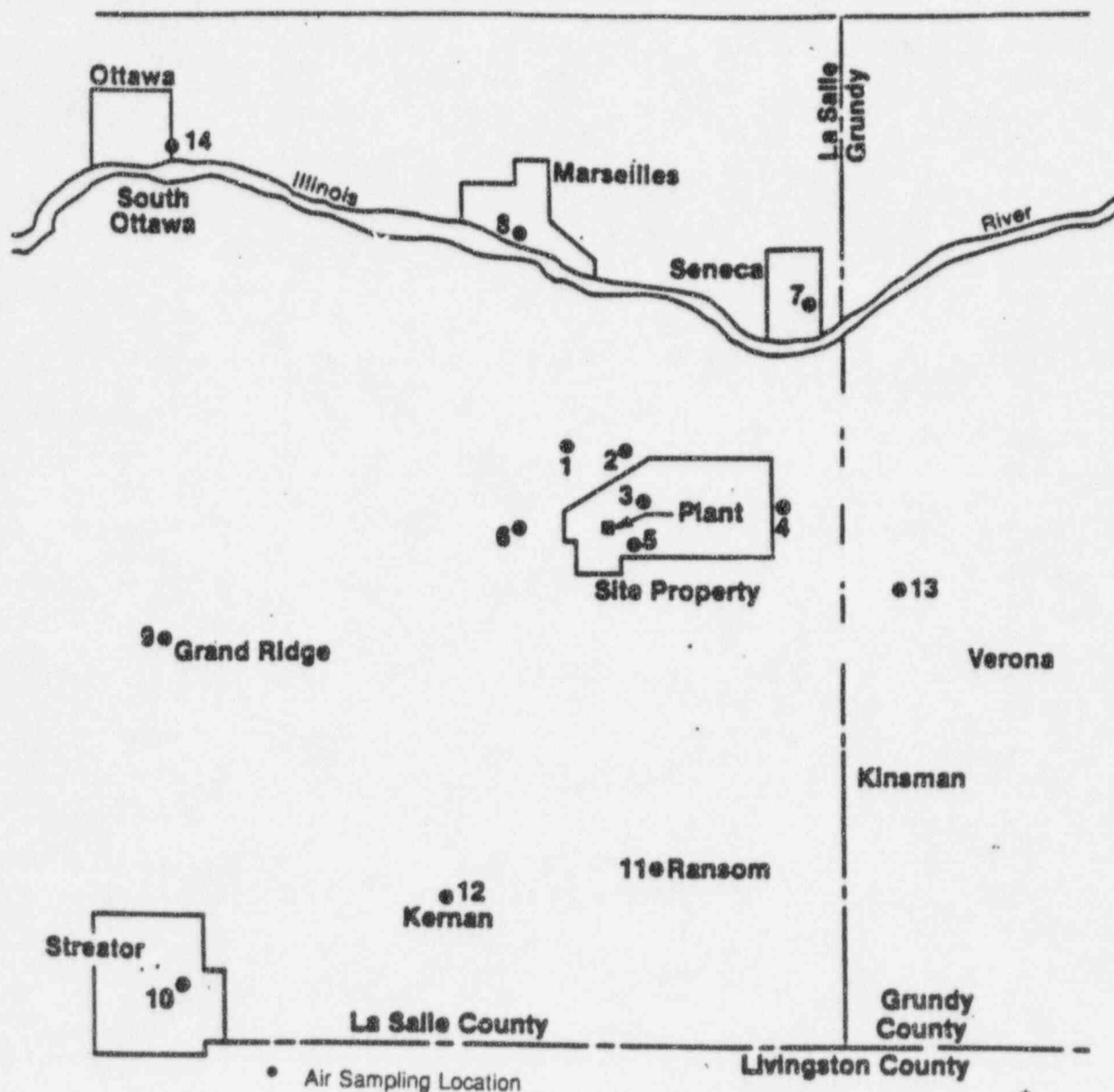


FIGURE 5.0-3

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#### LASALLE COUNTY STATION

#### FIXED AIR SAMLING SITES

L-01 Nearsite No. 1	L-08 Marseilles
L-02 Nearsite No. 2	L-09 Grand Ridge
L-03 Onsite No. 3	L-10 Streator
L-04 Nearsite No. 4	L-11 Ransom
L-05 Onsite No. 5	L-12 Kernan
L-06 Nearsite No. 6	L-13 Route 6 at Gonnam Rd.
L-07 Seneca	L-14 Ottawa



FIGURE 5.0-4

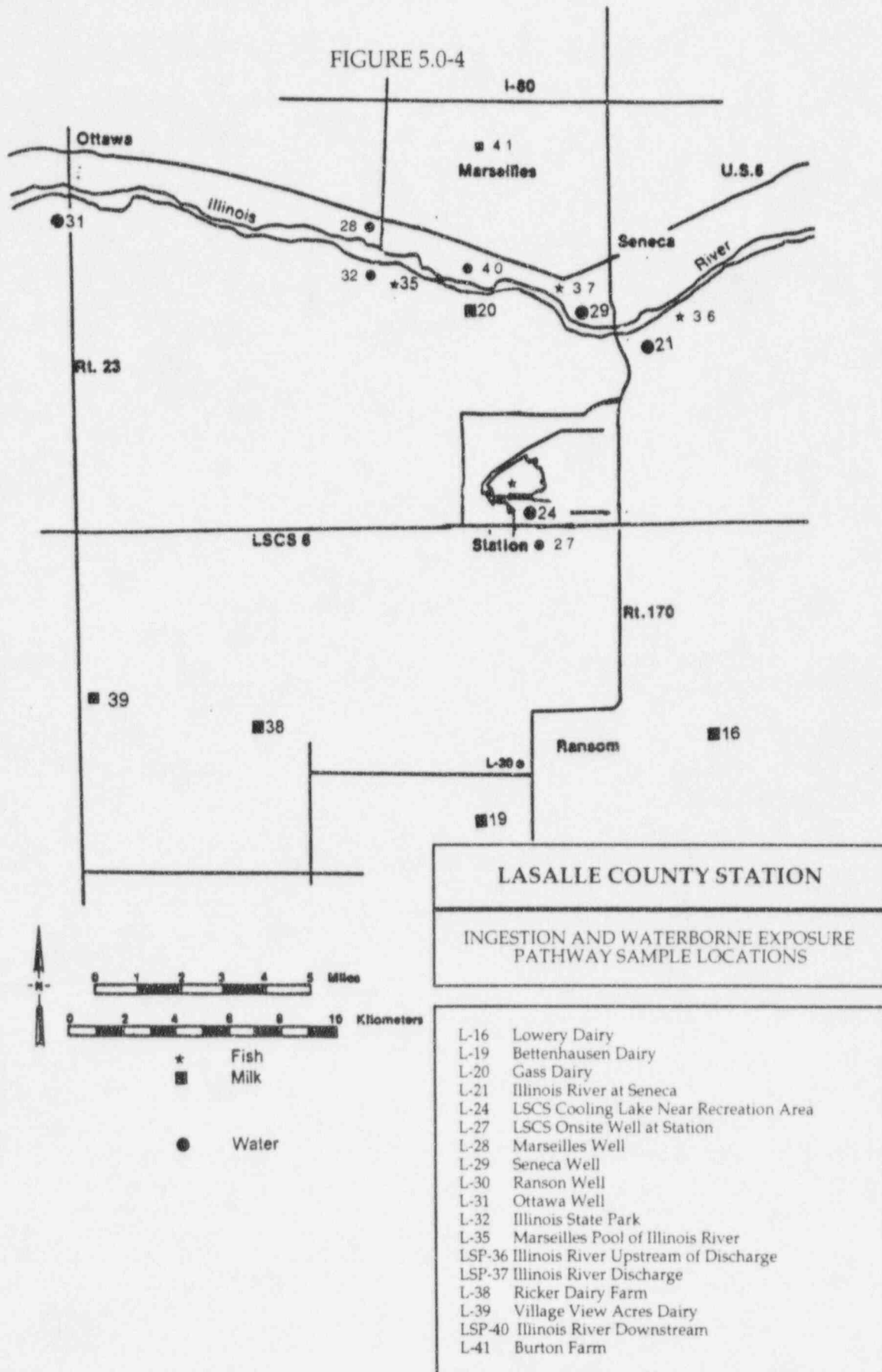


TABLE 5.0-1

LaSalle Station Radiological Environmental Monitoring Locations	Air Sampling		Cooling Water	Fish	Lake Water	Milk	Sediments	Surface Water	Ground/Well Water
		TLD							
L-01 Nearsite No. 1	0	0	.	.	.	.	.	.	.
L-02 Nearsite No. 2	0	0	.	.	.	.	.	.	.
L-03 Onsite No. 3	0	0	.	.	.	.	.	.	.
L-04 Nearsite No. 4	0	0	.	.	.	.	.	.	.
L-05 Onsite No. 5	0	0	.	.	.	.	.	.	.
L-06 Nearsite No. 6	0	0	.	.	.	.	.	.	.
L-07 Seneca	0	0	.	.	.	.	.	.	.
L-08 Marseilles	0	0	.	.	.	.	.	.	.
L-09 Grand Ridge	0	0	.	.	.	.	.	.	.
L-10 Steator	0	0	.	.	.	.	.	.	.
L-11 Ransom	0	0	.	.	.	.	.	.	.
L-12 Kernan	0	0	.	.	.	.	.	.	.
L-13 Route 6 at Gonnam Road	0	0	.	.	.	.	.	.	.
L-14 Ottawa	0	0	.	.	.	.	.	.	.
L-16 Lowery Dairy	.	.	.	.	.	0	.	.	.
L-19 Bettenhausen Dairy	.	.	.	.	.	0	.	.	.
L-20 Gass Dairy	.	.	.	.	.	0	.	.	.
L-21 Illinois River at Seneca	.	.	.	.	.	.	.	0	.
L-24 LSCS Cooling Lake near Recreation Area	.	.	.	0	.	.	.	0	.
L-27 LSCS Onsite Well at Station	.	.	.	.	.	.	.	.	0
L-28 Marseilles Well	.	.	.	.	.	.	.	.	0
L-29 Seneca Well	.	.	.	.	.	.	.	.	0
L-30 Ransom Well	.	.	.	.	.	.	.	.	0
L-31 Ottawa Well	.	.	.	.	.	.	.	.	0
L-32 Illinois State Park	.	.	.	.	.	.	.	.	0
L-34 Downstream of Cooling Lake Discharge Structure	.	.	.	.	.	.	0	.	.
L-35 Marseilles Pool of Illinois River	.	.	.	0	.	.	.	.	.
LSP-36 Illinois River Upstream of Discharge	.	.	.	0	.	.	.	.	.
LSP-37 Illinois River Discharge	.	.	.	0	.	.	.	.	.
L-38 Ricker Dairy Farm <sup>a</sup>	.	.	.	.	.	0	.	.	.
L-39 Village View Acres Dairy <sup>b</sup>	.	.	.	.	.	0	.	.	.
LSP-40 Illinois River Downstream	.	.	.	.	.	.	0	0	.
L-41 Burton Farm <sup>a</sup>	.	.	.	.	.	0	.	.	.
CENSUS									
Dairy									
Residence									
Livestock									

<sup>a</sup> Ricker Dairy Farm (L-38) went out of business in June of 1995 and was replaced by Burton Farm (L-41).

<sup>b</sup> Village View Acres Dairy (L-39) went out of business in January of 1995.

TABLE 5.0-2

## LASALLE STATION

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLING LOCATIONS

1. AIR SAMPLERS

<u>Site Code</u> <sup>a</sup>	<u>Location</u>	<u>Distance</u> <u>(miles)</u>	<u>Direction</u> <u>(°)</u>
L-01	Nearsite No. 1	0.5	337
L-02	Nearsite No. 2	0.6	25
L-03	Onsite No. 3	0.2	60
L-04	Nearsite No. 4	1.5	81
L-05	Onsite Station No. 5	0.3	115
L-06	Nearsite No. 6	0.4	248
L-07	Seneca	5.2	33
L-08	Marseilles	6.3	336
L-09 (C)	Grand Ridge	10.4	260
L-10 (C)	Steator	13.5	222
L-11	Ransom	6.0	177
L-12 (C)	Kernan	5.0	207
L-13	Route 6 at Gonnam Road	7.0	95
L-14 (C)	Ottawa	12.0	311

2. TLDs

a. Same as No. 1.

b. Special TLD locations

<u>Site Code</u>	<u>Distance</u> <u>(miles)</u>	<u>Direction</u> <u>(°)</u>
Inner Ring		
L-101-1,2	0.5	357
L-102-1,2	0.6	17
L-103-1,2	0.7	47
L-104-1,2	0.8	65
L-105-1,2	0.7	91
L-106-1,2	1.4	110
L-107-1,2	0.8	128
L-108-1,2	0.5	156
L-109-1,2	0.6	178
L-110-1,2	0.6	205
L-111b-1,2	0.8	230
L-112-1,2	0.9	244
L-113a-1,2	0.8	262
L-114-1,2	0.9	288
L-115-1,2	0.7	310
L-116-1,2	0.6	330

<sup>a</sup> Control (background) locations are denoted by a "C" after site code. All other locations are indicators.

TABLE 5.0-2 (continued)

## LASALLE STATION

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLING LOCATIONS

2. TLDs

## b. Special TLD locations (continued)

<u>Site Code</u>	<u>Distance (miles)</u>	<u>Direction (°)</u>
Outer Ring		
L-201-3,4	4.0	0
L-202-3,4	3.6	23
L-203-1,2	4.0	56
L-204-1,2	3.5	78
L-205-1,2	3.5	102
L-205-3,4	5.1	90
L-206-1,2	4.3	125
L-207-1,2	4.5	150
L-208-1,2	4.5	170
L-209-1,2	4.0	192
L-210-1,2	3.3	216
L-212-1,2	4.0	255
L-213-3,4	4.9	270
L-214-3,4	5.1	291
L-215-3,4	5.0	320
L-216-3,4	5.0	338

3. MILK

<u>Site Code<sup>a</sup></u>	<u>Location</u>	<u>Distance (mile)</u>	<u>Direction (°)</u>
L-16 (C)	Lowery Dairy	7.2	120
L-19 (C)	Bettenhausen Dairy	7.0	180
L-20	Gass Dairy <sup>b</sup>	4.6	348
L-38 (C)	Ricker Dairy Farm <sup>c</sup>	7.6	213
L-39 (C)	Village View Acres Dairy <sup>d</sup>	10.5	232
L-41 (C)	Burton Farm <sup>c</sup>	7.5	359

<sup>a</sup> Control (background) locations are denoted by a "C" after site code. All other locations are indicators.

<sup>b</sup> Additional dairy was not required by Technical Standards but was included to ensure that program has at least four milking stations. This is not a commercial dairy but a farm having milking cows for personal use.

<sup>c</sup> Ricker Dairy Farm (L-38) went out of business in June of 1995 and was replaced by Burton Farm (L-39).

<sup>d</sup> Village View Acres Dairy went out of business in January of 1995.

TABLE 5.0-2 (continued)

## LASALLE STATION

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLING LOCATIONS

4. GROUND/WELL WATER

<u>Site Code<sup>a</sup></u>	<u>Location</u>	<u>Distance (miles)</u>	<u>Direction (°)</u>
L-27	LSCS Onsite Well at Station	At Station	
L-28	Marseilles Well	7.0	326
L-29 (C)	Seneca Well	5.1	18
L-30	Ransom Well	6.0	191
L-31	Ottawa Well	12.8	304
L-32	Illinois State Park	6.5	326

5. SURFACE WATER

<u>Site Code<sup>a</sup></u>	<u>Location</u>	<u>Distance (miles)</u>	<u>Direction (°)</u>
L-21 (C)	Illinois River at Seneca	4.0	22
L-24	LSCS Cooling Lake Near Recreation Area	0.3	112
LSP-40	Illinois River Downstream	5.5	345

6. FISH

<u>Site Code<sup>a</sup></u>	<u>Location</u>	<u>Distance (miles)</u>	<u>Direction (°)</u>
L-24	LSCS Cooling Lake Near Recreation Area	0.3	40
L-35	Marseilles Pool of Illinois River	6.5	326
LSP-36 (C)	Illinois River Upstream of Discharge	4.5	20
LSP-37	Illinois River Discharge	4.5	5

7. SHORELINE SEDIMENTS

<u>Site Code<sup>a</sup></u>	<u>Location</u>	<u>Distance (miles)</u>	<u>Direction (°)</u>
L-34	Downstream of Cooling Lake Discharge Structure	At Station	
LSP-40	Illinois River Downstream	5.5	345

<sup>a</sup> Control (background) locations are denoted by a "C" after site code. All other locations are indicators.



TABLE 5.0-2 (continued)

## LASALLE STATION

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLE COLLECTION AND ANALYSES

Sample Media	Location		Collection Frequency	Type of Analysis	Frequency of Analysis	Remarks
	Code <sup>a</sup>	Site				
1. Airborne Particulates	Onsite and Near Field		Continuous operation for one week	Gross Beta	Weekly Quarterly	On all samples. On Quarterly composite from each location.
	L-01	Nearsite No. 1		Gamma Isot.		
	L-02	Nearsite No. 2		Gamma Isot.		
	L-03	Onsite No. 3		Gamma Isot.		
	L-04	Nearsite No. 4		Gamma Isot.		
	L-05	Onsite No. 5		Gamma Isot.		
	L-06	Nearsite No. 6	Filter Exchange	Weekly		
	Far Field		Continuous operation for one week	Gross Beta	Weekly	See footnote "b."
	L-07	Seneca		Gamma Isot.		
	L-08	Marseilles	Filter Exchange	Gamma Isot.	Weekly	See footnote "b". If gross beta in a sample exceeds 10 times the yearly mean of control samples.
	L-09 (C)	Grand Ridge		Gamma Isot.		
	L-10 (C)	Streator		Gamma Isot.		
	L-11	Ransom		Gamma Isot.		
	L-12 (C)	Kernan		Gamma Isot.		
	L-13	Route 6 at Gonnam Rd.		Gamma Isot.		
	L-14 (C)	Ottawa		Gamma Isot.		
2. Airborne Iodine	Same as 1.	Near Field	Weekly	I-131	Weekly	On all samples.
		Far Field	Biweekly	I-131	Biweekly	See footnote "b"
3. Air Sampling Train	Same as 1.		--	Test and Maintenance	Weekly	On all samplers.
4. TLD	a. Same as 1.		Quarterly	Gamma	Quarterly	Two sets of TLD's at all air sampler locations. All TLDs are read Quarterly. All TLDs are read Quarterly.
	b. L-101-1,2	Inner Ring	Quarterly	Gamma	Quarterly	
	102-1,2					
	103-1,2					
	104-1,2					
	105-1,2					
	106-1,2					
	107-1,2					
	108-1,2					
	109-1,2					

<sup>a</sup> Control (background) locations are denoted by a "C" in this column. All other locations are indicators.

<sup>b</sup> Far-field samples are analyzed when near-field results are inconsistent with previous measurements and radioactivity is confirmed as having its origin in airborne effluents released from the station or at the discretion of the Emergency Preparedness Director.

TABLE 5.0-2 (continued)

## LASALLE STATION

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLE COLLECTION AND ANALYSES

Sample Media	Location		Collection Frequency	Type of Analysis	Frequency of Analysis	Remarks
	Code <sup>a</sup>	Site				
4. TLDs (continued)	L-110-1,2 111b-1,2 112-1,2 113a-1,2 114-1,2 115-1,2 116-1,2					
	L-201-3,4 202-3,4 203-1,2 204-1,2 205-1,2,3,4 206-1,2 207-1,2 208-1,2 209-1,2 210-1,2 212-1,2 213-3,4	Outer Ring	Quarterly	Gamma	Quarterly	All TLDs are read Quarterly.
5. Milk	L-16 (C)	Lowery Dairy	Biweekly: May-October	I-131 Gamma Isot.	Biweekly Biweekly	On all samples. LLD: 0.5 pCi/L.
	L-19 (C)	Bettenhausen Dairy				
	L-20	Gass Dairy <sup>b</sup>				
	L-38 (C)	Ricker Dairy Farm <sup>c</sup>	Monthly: November-April	I-131 Gamma Isot.	Monthly Monthly	On all samples. LLD: 0.5 pCi/L.
	L-39 (C)	Village View Acres Dairy <sup>d</sup>				
	L-41 (C)	Burton Farm <sup>c</sup>				
6. Ground/Well Water	L-27	LSCS Onsite Well at Station	Quarterly	Gamma Isot. Tritium	Quarterly Quarterly	On all samples. On all samples.
	L-28	Marseilles Well	Quarterly			
	L-29 (C)	Seneca Well				
	L-30	Ransom Well				
	L-31	Ottawa Well				
	L-32	Illinois State Park				

<sup>a</sup> Control (background) locations are denoted by a "C" in this column. All other locations are indicators.

<sup>b</sup> Additional dairy was not required by Technical Standards but was included to ensure that the program has at least four milking stations. This is not a commercial dairy but a farm having milking cows for personal use.

<sup>c</sup> Ricker Dairy Farm (L-38) went out of business in June of 1995 and was replaced by Burton Farm (L-41).

<sup>d</sup> Village View Acres Dairy (L-39) went out of business in January of 1995.

TABLE 5.0-2 (continued)

## LASALLE STATION

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLE COLLECTION AND ANALYSES

Sample Media	Location		Collection Frequency	Type of Analysis	Frequency of Analysis	Remarks
	Code <sup>a</sup>	Site				
7. Surface Water	L-21 (C)	Illinois River at Seneca	Weekly	Gamma Isot.	Monthly	On monthly composites from each location.
	L-24	LSCS Cooling Lake		Tritium	Quarterly	On quarterly composites from each location.
	LSP-40	Illinois River Downstream				
8. Fish	L-24	LSCS Cooling Lake	Semiannually	Gamma Isot.	Semiannually	On edible portions only. At least two species.
	L-35	Marseilles Pool of Illinois River				
	LSP-36 (C)	Illinois River Upstream of Discharge				
	LSP-37	Illinois River Discharge				
9. Shoreline Sediments	L-34	Downstream of Cooling Lake	Semiannually	Gamma Isot.	Semiannually	On all Samples.
	LSP-40	Illinois River Downstream				
10. Land Use Census						
Milch Animals	a. Site boundary to 2 miles		--	a. Enumeration by a door to door or equivalent counting technique.	Annually	During grazing season.
	b. 2 miles to 5 miles		--	b. Enumeration by using referenced information from county agricultural agents or other reliable sources.	Annually	During grazing season.
	c. At dairies listed in Item 5.		--	c. Inquire as to feeding practices:	Annually	During grazing season.
				1. Pasture only.		
				2. Feed and chop only.		
				3. Pasture and feed: if both, ask farmer to estimate fraction of food from pasture: <25%, 25-50%, 50-75% or >75%.		
Nearest Residence Census	In all 16 sectors up to 5 miles				Annually	

<sup>a</sup> Control (background) locations are denoted by a "C" in this column. All other locations are indicators.

TABLE 5.0-3

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility LaSalle Nuclear Power StationDocket No. 50-373, 50-374Location of Facility LaSalle County, IllinoisReporting Period 1st Quarter 1995

(County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean <sup>a</sup> Range	Location with Highest Quarterly Mean		Control Locations Mean <sup>a</sup> Range	Number of Non-routine Results
				Location	Mean Range		
Air Particulates (pCi/m <sup>3</sup> )	Gross Beta 78	0.01	0.022 (78/78) (0.012-0.035)	L-02, Nearsite No. 2 0.6 mi @ 11°	0.023 (13/13) (0.012-0.035)	None	0
	Gamma Spec. 6	0.01	<LLD	-	-	None	0
Airborne Iodine (pCi/m <sup>3</sup> )	I-131 78	0.10	<LLD	-	-	None	0
Gamma Background (TLDs) (mR/Qtr.)	Gamma Dose 92	9.7	16.1 (84/84) (12.8-20.2)	L-205-2 3.5 mi @ 102°	20.2 (1/1)	14.9 (8/8) (14.2-16.2)	0
Milk (pCi/L)	I-131 10	0.5	<LLD	-	-	<LLD	0
	Gamma Spec. 10						
	Cs-134 10		<LLD	-	-	<LLD	0
	Cs-137 10		<LLD	-	-	<LLD	0
	Other Gammas 20		<LLD	-	-	<LLD	0
Surface Water (pCi/L)	Gamma Spec. 6			-	-		
	Cs-134 10		<LLD	-	-	<LLD	0
	Cs-137 10		<LLD	-	-	<LLD	0
	Other Gammas 20		<LLD	-	-	<LLD	0
	Tritium 2	200	<LLD	L-21, Illinois River at Seneca 4.0 mi @ 22°	370 (1/1)	370(1/1)	0
Well Water (pCi/L)	Gamma Spec. 6						
	Cs-134 10		<LLD	-	-	<LLD	0
	Cs-137 10		<LLD	-	-	<LLD	0
	Other Gammas 20		<LLD	-	-	<LLD	0
	Tritium 6	200	<LLD	-	-	<LLD	0

<sup>a</sup> Mean and range based on detectable measurements only. Fractions indicated in parentheses.

TABLE 5.0-4

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility LaSalle Nuclear Power Station Docket No. 50-373, 50-374  
 Location of Facility LaSalle County, Illinois Reporting Period 2nd Quarter 1995  
 (County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean <sup>a</sup> Range	Location with Highest Quarterly Mean		Control Locations Mean <sup>a</sup> Range	Number of Non-routine Results
				Location	Mean Range		
Air Particulates (pCi/m <sup>3</sup> )	Gross Beta 78	0.01	0.017 (78/78) (0.011-0.033)	L-01 <sup>b</sup> , Nearsite No. 1 0.5 mi @ 337°	0.017 (13/13) (0.012-0.028)	None	0
	Gamma Spec. 6	0.01	<LLD	-	-	None	0
Airborne Iodine (pCi/m <sup>3</sup> )	I-131 78	0.10	<LLD	-	-	None	0
Gamma Background (TLDs) (mR/Qtr.)	Gamma Dose 92	9.7	16.3 (84/84) (13.8-17.9)	L-210-1, 3.3 mi @ 216°	17.9 (1/1)	15.0 (8/8) (14.3-16.3)	0
Milk (pCi/L)	I-131 17	0.5	<LLD	-	-	<LLD	0
	Gamma Spec. 17						
	Cs-134	10	<LLD	-	-	<LLD	0
	Cs-137	10	<LLD	-	-	<LLD	0
	Other Gammas	20	<LLD	-	-	<LLD	0
Surface Water (pCi/L)	Gamma Spec. 6						
	Cs-134	10	<LLD	-	-	<LLD	0
	Cs-137	10	<LLD	-	-	<LLD	0
	Other Gammas	20	<LLD	-	-	<LLD	0
	Tritium 2	200	215 (1/1)	L-21, Illinois River at Seneca 4.0 mi @ 22°	307 (1/1)	307 (1/1)	0

<sup>a</sup> Mean and range based on detectable measurements only. Fractions indicated in parentheses.

<sup>b</sup> All locations had identical means of 0.017 pCi/m<sup>3</sup>. Only L-01 is detailed in this summary.



TABLE 5.0-4 (continued)

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility LaSalle Nuclear Power Station Docket No. 50-373, 50-374  
 Location of Facility LaSalle County, Illinois Reporting Period 2nd Quarter 1995  
 (County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean <sup>a</sup> Range	Location with Highest Quarterly Mean		Control Locations Mean <sup>a</sup> Range	Number of Non-routine Results
				Location	Mean Range		
Well Water (pCi/L)	Gamma Spec. 6						
	Cs-134	10	<LLD	-	-	<LLD	0
	Cs-137	10	<LLD	-	-	<LLD	0
	Other Gammas	20	<LLD	-	-	<LLD	0
	Tritium 6	200	<LLD	-	-	<LLD	0
Bottom Sediments (pCi/g dry)	Gamma Spec. 1						
	Cs-134	0.2	<LLD	-	-	None	0
	Cs-137	0.2	<LLD	-	-	None	0
	Other Gammas	0.2	<LLD	-	-	None	0
Fish (pCi/g wet)	Gamma Spec. 17						
	Cs-134	0.1	<LLD	-	-	<LLD	0
	Cs-137	0.1	<LLD	-	-	<LLD	0
	Other Gammas	0.2	<LLD	-	-	<LLD	0

<sup>a</sup> Mean and range based on detectable measurements only. Fractions indicated in parentheses.

TABLE 5.0-5

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility LaSalle Nuclear Power Station Docket No. 50-373, 50-374  
 Location of Facility LaSalle County, Illinois Reporting Period 3rd Quarter 1995  
 (County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean <sup>a</sup> Range	Location with Highest Quarterly Mean		Control Locations Mean <sup>a</sup> Range	Number of Non-routine Results
				Location	Mean Range		
Air Particulates (pCi/m <sup>3</sup> )	Gross Beta 78	0.01 <sup>b</sup>	0.017 (77/78) (0.014-0.054)	L-06, Nearsite No. 6 0.2 mi @ 248°	0.026 (13/13) (0.015-0.040)	None	0
	Gamma Spec. 6	0.01	<LLD	-	-	None	0
Airborne Iodine (pCi/m <sup>3</sup> )	I-131 78	0.10	<LLD	-	-	None	0
Gamma Background (TLDs) (mR/Qtr.)	Gamma Dose 92	9.7	16.6 (84/84) (13.9-18.8)	L-102-1, 0.6 mi @ 17°	18.8 (1/1)	14.8 (8/8) (13.9-16.9)	0
Milk (pCi/L)	I-131 18	0.5	<LLD	-	-	<LLD	0
	Gamma Spec. 18						
	Cs-134	10	<LLD	-	-	<LLD	0
	Cs-137	10	<LLD	-	-	<LLD	0
	Other Gammas	20	<LLD	-	-	<LLD	0
Surface Water (pCi/L)	Gamma Spec. 6			-	-		
	Cs-134	10	<LLD	-	-	<LLD	0
	Cs-137	10	<LLD	-	-	<LLD	0
	Other Gammas	20	<LLD	-	-	<LLD	0
	Tritium 2	200	212 (1/1)	L-21, Illinois River at Seneca 4.0 mi @ 22°	366 (1/1)	366 (1/1)	0

<sup>a</sup> Mean and range based on detectable measurements only. Fractions indicated in parentheses.

<sup>b</sup> One (1) result was excluded in the determination of LLD for gross beta. Higher than normal LLD (<0.019 pCi/m<sup>3</sup>) resulted from low volume due to a blown fuse.

TABLE 5.0-5 (continued)

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility LaSalle Nuclear Power Station Docket No. 50-373, 50-374  
 Location of Facility LaSalle County, Illinois Reporting Period 3rd Quarter 1995  
 (County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean <sup>a</sup> Range	Location with Highest Quarterly Mean		Control Locations Mean <sup>a</sup> Range	Number of Non-routine Results
				Location	Mean Range		
Well Water (pCi/L)	Gamma Spec.	6					
	Cs-134	10	<LLD	-	-	<LLD	0
	Cs-137	10	<LLD	-	-	<LLD	0
	Other Gammas	20	<LLD	-	-	<LLD	0
	Tritium	6	<LLD	-	-	<LLD	0

<sup>a</sup> Mean and range based on detectable measurements only. Fractions indicated in parentheses.

TABLE 5.0-6

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility LaSalle Nuclear Power Station Docket No. 50-373, 50-374  
 Location of Facility LaSalle County, Illinois Reporting Period 4th Quarter 1995  
 (County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean <sup>a</sup> Range	Location with Highest Quarterly Mean		Control Locations Mean <sup>a</sup> Range	Number of Non-routine Results
				Location	Mean Range		
Air Particulates (pCi/m <sup>3</sup> )	Gross Beta 70	0.01	0.026 (60/60) (0.008-0.048)	L-04, Nearsite No. 4 1.5 mi @ 81°	0.028 (4/4) (0.017-0.044)	0.027 (10/10) (0.017-0.039)	0
	Gamma Spec. 6	0.01	<LLD	-	-	None	0
Airborne Iodine (pCi/m <sup>3</sup> )	I-131 70	0.10	<LLD	-	-	None	0
Gamma Background (TLDs) (mR/Qtr.)	Gamma Dose 92	9.7	16.0 (84/84) (13.1-17.8)	L-113A-1, 0.8 mi @ 262°	17.8 (1/1)	14.6 (8/8) (13.8-16.4)	0
Milk (pCi/L)	I-131 6	0.5	<LLD	-	-	<LLD	0
	Gamma Spec. 6						
	Cs-134 10		<LLD	-	-	<LLD	0
	Cs-137 10		<LLD	-	-	<LLD	0
	Other Gammas 20		<LLD	-	-	<LLD	0
Surface Water (pCi/L)	Gamma Spec. 7			-	-		
	Cs-134 10		<LLD	-	-	<LLD	0
	Cs-137 10		<LLD	-	-	<LLD	0
	Other Gammas 20		<LLD	-	-	<LLD	0
	Tritium 3	200	373 (2/2) (363-383)	L-24, LSCS Cooling Lake, 0.3 mi @ 122°	383 (1/1)	247 (1/1)	0

<sup>a</sup> Mean and range based on detectable measurements only. Fractions indicated in parentheses.

TABLE 5.0-6 (continued)

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility LaSalle Nuclear Power StationDocket No. 50-373, 50-374Location of Facility LaSalle County, IllinoisReporting Period 4th Quarter 1995

(County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean <sup>a</sup> Range	Location with Highest Quarterly Mean		Control Locations Mean <sup>a</sup> Range	Number of Non-routine Results
				Location	Mean Range		
Well Water (pCi/L)	Gamma Spec. 6						
	Cs-134	10	<LLD	-	-	<LLD	0
	Cs-137	10	<LLD	-	-	<LLD	0
	Other Gammas	20	<LLD	-	-	<LLD	0
	Tritium 6	200	<LLD	-	-	<LLD	0
Bottom Sediments (pCi/g dry)	Gamma Spec. 2						
	Cs-134	0.2	<LLD	-	-	None	0
	Cs-137	0.2	<LLD	-	-	None	0
	Other Gammas	0.2	<LLD	-	-	None	0
Fish (pCi/g wet)	Gamma Spec. 21						
	Cs-134	0.1	<LLD	-	-	<LLD	0
	Cs-137	0.1	<LLD	-	-	<LLD	0
	Other Gammas	0.2	<LLD	-	-	<LLD	0

<sup>a</sup> Mean and range based on detectable measurements only. Fractions indicated in parentheses.



TABLE 5.1-1

Commonwealth Edison Company

Date: 27-MAR-96

Environmental Site Report for LaSalle

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Gamma Radiation Measured in mR by TLDs

Site	Description	Quarter 1 1995	Quarter 2 1995	Quarter 3 1995	Quarter 4 1995
I. INDICATOR LOCATIONS					
a. Air Samplers (2 TLDs per location)					
L-01	NEARSITE NO. 1	16.6	17.2	16.5	16.5
L-02	NEARSITE NO. 2	15.3	15.1	15.9	15.0
L-03	ONSITE NO. 3	14.8	15.2	15.2	14.8
L-04	NEARSITE NO. 4	15.3	15.1	16.0	15.4
L-05	ONSITE NO. 5	16.0	16.1	16.9	17.1
L-06	NEARSITE NO. 6	16.4	16.3	16.9	16.2
L-07	SENECA	16.1	16.3	16.6	16.0
L-08	MARSEILLES	16.3	16.1	16.8	15.7
L-11	RANSOM	13.8	14.1	14.5	13.1
L-12	ROUTE 6	14.5	15.1	16.6	15.1
Air Sampler Mean $\pm$ S.D.		15.5 $\pm$ 0.9	15.6 $\pm$ 0.9	16.1 $\pm$ 0.8	15.6 $\pm$ 1.1
Annual Air Sampler Mean $\pm$ S.D.					15.7 $\pm$ 0.9
b. Inner Ring (100 Series)					
L-101-1		16.8	16.3	17.4	16.1
L-101-2		15.3	16.6	16.7	15.5
L-102-1		17.5	17.9	18.6	17.3
L-102-2		16.6	17.1	18.8	18.0
L-103-1		15.9	16.5	16.8	16.8
L-103-2		16.0	16.3	17.4	16.8
L-104-1		16.4	16.3	17.4	15.7
L-104-2		15.3	17.7	17.3	15.8
L-105-1		17.7	16.7	18.0	17.1
L-105-2		17.3	17.1	18.7	17.1
L-106-1		15.4	15.7	16.4	15.6
L-106-2		15.8	16.2	16.8	15.2
L-107-1		16.5	16.6	17.6	16.9
L-107-2		16.7	16.8	17.1	16.6
L-108-1		16.3	16.0	17.7	16.7
L-108-2		14.3	14.0	13.9	13.2
L-109-1		16.6	16.3	17.8	16.1
L-109-2		16.8	17.0	18.1	16.4
L-110-1		16.4	16.9	17.8	16.1
L-110-2		16.8	17.2	18.1	16.5
L-111-1		16.1	16.6	17.3	16.6
L-111-2		16.4	16.4	17.0	16.9
L-112-1		15.7	15.5	16.5	16.6

TABLE 5.1-1 (continued)

Date: 27-MAR-96

Environmental Site Report for LaSalle

Page: 2

Site	Description	Quarter 1 1995	Quarter 2 1995	Quarter 3 1995	Quarter 4 1995
b. Inner Ring (100 Series)					
L-112-2		16.4	16.9	17.2	16.7
L-113A-1		17.3	17.5	17.6	17.3
L-113A-2		16.8	17.2	17.1	16.5
L-114-1		16.6	17.0	17.1	16.4
L-114-2		16.7	17.0	17.1	16.2
L-115-1		14.8	15.3	14.5	16.0
L-115-2		13.6	14.6	14.4	14.0
L-116-1		14.4	14.8	15.1	14.0
L-116-2		14.4	14.4	14.6	14.6
Inner Ring Mean $\pm$ S.D.		16.2 $\pm$ 1.0	16.4 $\pm$ 0.9	17.0 $\pm$ 1.2	16.2 $\pm$ 1.1
Annual Inner Ring Mean $\pm$ S.D.					16.4 $\pm$ 1.1
c. Outer Ring (200 Series)					
L-201-3		12.8	14.1	15.2	15.3
L-201-4		16.0	16.6	16.9	16.0
L-202-3		14.0	13.8	14.4	14.6
L-202-4		14.2	14.5	15.0	14.6
L-203-1		15.8	16.3	16.0	15.8
L-203-2		16.3	16.9	17.1	16.4
L-204-1		15.8	16.3	17.2	16.5
L-204-2		15.5	17.3	16.1	16.0
L-205-1		16.6	16.6	16.9	16.4
L-205-2		20.2	16.9	16.9	16.5
L-205-3		13.8	16.0	16.2	16.2
L-205-4		13.4	15.8	15.4	15.6
L-206-1		16.6	16.6	17.2	15.8
L-206-2		16.1	16.7	16.7	16.3
L-207-1		16.4	17.6	16.3	16.2
L-207-2		15.3	15.9	16.1	15.6
L-208-1		16.6	17.0	16.8	16.0
L-208-2		16.9	17.0	16.9	16.5
L-209-1		15.9	15.7	15.8	15.8
L-209-2		16.2	16.5	16.1	16.4
L-210-1		17.3	17.9	17.8	17.4
L-210-2		17.4	17.3	17.3	17.5
L-212-1		17.4	17.0	16.9	16.1
L-212-2		16.3	17.0	16.6	16.4
L-213-3		15.6	15.8	14.9	15.2
L-213-4		15.6	15.5	15.7	15.0
L-214-3		16.0	15.9	16.2	15.6
L-214-4		16.1	17.0	15.9	15.1
L-215-3		16.4	16.8	16.9	17.1
L-215-4		16.3	17.1	17.6	17.0
L-216-3		16.9	17.0	16.9	16.5
L-216-4		16.8	16.6	16.5	16.2
Outer Ring Mean $\pm$ S.D.		16.2 $\pm$ 1.2	16.4 $\pm$ 0.9	16.3 $\pm$ 0.8	16.0 $\pm$ 0.9
Annual Outer Ring Mean $\pm$ S.D.					16.2 $\pm$ 1.0
INDICATOR LOCATION MEAN $\pm$ S.D.		16.1 $\pm$ 1.1	16.3 $\pm$ 1.0	16.6 $\pm$ 1.1	16.0 $\pm$ 1.0
Annual INDICATOR LOCATION MEAN $\pm$ S.D.					16.2 $\pm$ 1.0
II. CONTROL LOCATIONS (2 TLDs per location)					
L-09	GRAND RIDGE	14.9	15.1	14.7	14.2
L-10	STREATOR	14.2	14.3	13.9	13.8
L-12	KERNAN	14.2	14.4	14.0	13.8
L-14	OTTAWA	16.2	16.3	16.9	16.4
CONTROL LOCATION Mean $\pm$ S.D.		14.9 $\pm$ 1.0	15.0 $\pm$ 0.9	14.8 $\pm$ 1.4	14.6 $\pm$ 1.3
Annual CONTROL LOCATION Mean $\pm$ S.D.					14.8 $\pm$ 1.0
III. SPECIAL INTEREST LOCATIONS (1 TLD per location)					
L-304-1	LEASED FARM LAND	17.2	18.0	18.1	17.6
L-305-1	BOAT RAMP	14.1	14.4	14.7	14.5
L-310-1	NGET BUILDING	16.8	18.1	17.2	17.1
L-316-1	LEASED FARM LAND	16.7	16.3	17.4	16.9
SPECIAL INTEREST LOCATION Mean $\pm$ S.D.		16.2 $\pm$ 1.4	16.7 $\pm$ 1.7	16.9 $\pm$ 1.5	16.5 $\pm$ 1.4
Annual SPECIAL INTEREST LOCATION Mean $\pm$ S.D.					16.6 $\pm$ 1.4

COMMENTS: "\*" Indicates lost dosimeter. A portion of the Dose was estimated.  
 "e" Indicates edited dosimeter. The original Dose was replaced with an estimated value.

APPENDIX II

METEOROLOGICAL DATA

LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: JANUARY-MARCH 1995

STABILITY CLASS - EXTREMELY UNSTABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	1	0	0	1
NNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	0	0	1	0	0	1

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: JANUARY-MARCH 1995

STABILITY CLASS - MODERATELY UNSTABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	3	0	0	0	3
NE	0	0	1	0	0	0	1
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	1	0	0	0	0	1
S	0	1	2	0	0	0	3
SSW	0	0	0	0	0	0	0
SW	0	1	0	1	1	0	3
WSW	0	0	0	0	0	0	0
W	0	0	0	0	3	0	3
WNW	0	0	0	0	1	4	5
NW	0	0	0	1	1	2	4
NNW	0	0	0	0	1	0	1
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	3	6	2	7	6	24

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 0  
Hours of missing stability measurements in all stability classes: 0



LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: JANUARY-MARCH 1995

STABILITY CLASS - SLIGHTLY UNSTABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION -----	WIND SPEED (in mph)						TOTAL -----
	0.8-3 -----	4-7 -----	8-12 -----	13-18 -----	19-24 -----	> 24 -----	
N	0	1	1	1	0	0	3
NNE	0	0	2	0	0	0	2
NE	0	1	1	0	0	0	2
ENE	0	0	1	0	0	0	1
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	2	0	0	2
SSE	0	0	1	0	0	0	1
S	0	0	0	1	0	0	1
SSW	0	0	0	2	4	0	6
SW	0	1	3	0	2	0	6
WSW	0	3	0	1	1	0	5
W	0	0	0	3	3	0	6
WNW	0	0	0	4	8	8	20
NW	0	2	0	9	5	3	19
NNW	0	0	0	7	2	0	9
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	8	9	30	25	11	83

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 0  
Hours of missing stability measurements in all stability classes: 0

LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: JANUARY-MARCH 1995

STABILITY CLASS - NEUTRAL (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	2	3	20	30	18	5	78
NNE	1	12	31	36	6	5	91
NE	0	10	17	13	14	0	54
ENE	2	8	7	20	24	4	65
E	4	15	14	24	15	5	77
ESE	0	4	8	21	8	1	42
SE	1	3	6	6	12	14	42
SSE	0	3	2	8	4	8	25
S	0	4	4	2	13	11	34
SSW	1	0	2	7	14	16	40
SW	1	4	5	2	3	5	20
WSW	0	4	3	22	11	8	48
W	0	5	18	35	13	23	94
WNW	0	7	21	54	37	78	197
NW	0	10	24	35	34	32	135
NNW	0	3	18	33	33	28	115
VARIABLE	0	1	0	0	0	0	1
TOTAL	12	96	200	348	259	243	1158

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 8  
Hours of missing stability measurements in all stability classes: 0

LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: JANUARY-MARCH 1995

STABILITY CLASS - SLIGHTLY STABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	4	6	9	6	2	27
NNE	1	4	11	2	7	8	33
NE	0	5	10	4	2	0	21
ENE	1	1	9	12	3	0	26
E	0	0	4	16	4	4	28
ESE	0	0	5	9	14	24	52
SE	0	1	2	2	5	3	13
SSE	0	0	1	2	3	0	6
S	0	0	2	2	5	24	33
SSW	0	3	1	2	'	14	27
SW	0	3	2	5	1	23	44
WSW	0	3	4	6	18	6	37
W	0	5	2	19	27	13	66
WNW	0	4	12	21	29	7	73
NW	0	4	19	25	8	13	69
NNW	0	3	16	13	5	0	37
VARIABLE	0	0	0	0	0	0	0
TOTAL	2	40	106	143	154	141	592

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 4  
Hours of missing stability measurements in all stability classes: 0

# LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: JANUARY-MARCH 1995

STABILITY CLASS - MODERATELY STABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	4	0	1	0	5
NNE	1	0	3	1	0	0	5
NE	0	0	0	0	0	0	0
ENE	1	0	1	2	1	0	5
E	1	0	2	1	2	0	6
ESE	1	1	2	3	7	9	23
SE	1	2	4	2	3	2	14
SSE	0	2	6	1	0	0	9
S	0	6	1	0	0	13	20
SSW	0	0	0	2	3	19	24
SW	0	0	0	0	1	15	16
WSW	1	1	1	4	3	8	18
W	0	0	3	4	3	2	12
WNW	0	1	1	8	4	0	14
NW	0	1	2	4	1	0	8
NNW	0	0	1	2	5	0	8
VARIABLE	0	0	0	0	0	0	0
TOTAL	6	14	31	34	34	68	187

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 0  
Hours of missing stability measurements in all stability classes: 0

# LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: JANUARY-MARCH 1995

STABILITY CLASS - EXTREMELY STABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	2	0	0	0	0	2
NE	0	1	0	0	0	0	1
ENE	0	2	0	0	0	0	2
E	1	1	3	0	0	0	5
ESE	0	0	0	1	0	1	2
SE	0	1	0	2	0	0	3
SSE	0	0	1	2	8	5	16
S	0	0	0	5	3	16	24
SSW	0	0	0	0	0	23	23
SW	0	0	0	0	0	4	4
WSW	1	0	0	3	2	1	7
W	0	1	0	0	0	1	2
WNW	0	1	0	0	0	1	2
NW	0	1	4	0	0	0	5
NNW	0	0	2	3	0	0	5
VARIABLE	0	0	0	0	0	0	0
TOTAL	2	10	10	16	13	52	103

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 0  
Hours of missing stability measurements in all stability classes: 0



LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: APRIL-JUNE 1995

STABILITY CLASS - EXTREMELY UNSTABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	1	0	0	1
NNE	0	0	4	1	0	0	5
NE	0	0	6	2	0	0	8
ENE	0	0	0	5	0	0	5
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	0	10	9	0	0	19

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 11

LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: APRIL-JUNE 1995

STABILITY CLASS - MODERATELY UNSTABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION -----	WIND SPEED (in mph)						TOTAL -----
	0.8-3 -----	4-7 -----	8-12 -----	13-18 -----	19-24 -----	> 24 -----	
N	0	0	1	1	0	0	2
NNE	0	2	8	5	0	0	15
NE	0	2	4	0	0	0	6
ENE	0	0	1	0	0	0	1
E	0	0	1	0	0	0	1
ESE	0	0	1	0	0	0	1
SE	0	0	0	0	0	0	0
SSE	0	0	0	2	1	0	3
S	0	0	1	2	2	0	5
SSW	0	1	1	8	0	0	10
SW	0	0	3	1	0	0	4
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	1	1
WNW	0	0	0	0	1	3	4
NW	0	0	0	0	6	1	7
NNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	5	21	19	10	5	60

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 0  
Hours of missing stability measurements in all stability classes: 11

# LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: APRIL-JUNE 1995

STABILITY CLASS - SLIGHTLY UNSTABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	4	1	0	0	5
NNE	0	1	4	0	0	0	5
NE	0	2	7	3	0	2	14
ENE	0	0	3	1	1	1	6
E	0	0	1	2	2	0	5
ESE	0	0	1	0	1	0	2
SE	0	2	1	0	0	0	3
SSE	0	0	3	6	0	0	9
S	0	0	5	4	4	0	13
SSW	0	2	4	6	2	0	14
SW	0	4	6	8	0	0	18
WSW	0	0	6	2	0	1	9
W	0	1	0	1	1	4	7
WNW	0	0	0	3	8	5	16
NW	0	0	0	3	4	2	9
NNW	0	0	1	1	0	1	3
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	12	46	41	23	16	138

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 0  
Hours of missing stability measurements in all stability classes: 11

# LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: APRIL-JUNE 1995

STABILITY CLASS - NEUTRAL (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	8	3	9	3	0	23
NNE	0	12	18	18	8	1	57
NE	3	16	57	61	10	9	156
ENE	0	13	23	30	21	22	109
E	2	5	27	14	12	21	81
ESE	1	4	11	14	7	19	56
SE	0	3	11	4	4	11	33
SSE	0	2	5	8	1	0	16
S	1	3	7	8	5	8	32
SSW	0	2	10	8	3	9	32
SW	0	3	7	14	6	16	46
WSW	2	6	16	12	6	32	74
W	0	8	19	14	6	28	75
WNW	0	5	14	13	21	36	89
NW	0	8	17	26	27	7	85
NNW	3	2	18	10	7	0	40
VARIABLE	0	0	0	0	0	0	0
TOTAL	12	100	263	263	147	219	1004

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 14  
Hours of missing stability measurements in all stability classes: 11

# LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: APRIL-JUNE 1995

STABILITY CLASS - SLIGHTLY STABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	3	9	4	6	0	22
NNE	0	1	9	2	2	0	14
NE	1	8	10	10	0	0	29
ENE	2	4	17	19	5	0	47
E	0	7	8	11	11	11	48
ESE	2	6	5	11	13	36	73
SE	2	1	3	7	2	18	33
SSE	1	3	3	7	8	11	33
S	2	4	0	3	10	15	34
SSW	0	4	1	8	12	16	41
SW	0	0	7	14	7	9	37
WSW	0	2	11	12	2	8	35
W	0	2	6	7	10	5	30
WNW	1	2	7	12	12	9	43
NW	1	1	4	12	19	1	38
NNW	0	3	2	5	7	0	17
VARIABLE	0	0	0	0	0	0	0
TOTAL	12	51	102	144	126	139	574

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 21  
 Hours of missing stability measurements in all stability classes: 11

# LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: APRIL-JUNE 1995

STABILITY CLASS - MODERATELY STABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	1	0	4	3	8
NNE	3	0	0	1	0	0	4
NE	2	1	0	0	0	0	3
ENE	0	1	4	0	2	0	7
E	0	5	2	3	1	0	11
ESE	0	4	3	2	3	1	13
SE	0	6	3	7	4	3	23
SSE	0	1	3	10	3	0	17
S	0	2	3	4	4	7	20
SSW	0	0	5	5	12	7	29
SW	0	2	1	6	3	3	15
WSW	1	1	7	16	5	8	38
W	0	0	5	14	11	10	40
WNW	0	1	3	2	5	4	15
NW	0	0	4	7	9	2	22
NNW	0	2	1	7	2	0	12
VARIABLE	0	0	0	0	0	0	0
TOTAL	6	26	45	84	68	48	277

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 8  
Hours of missing stability measurements in all stability classes: 11



# LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: APRIL-JUNE 1995

STABILITY CLASS - EXTREMELY STABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	1	0	0	0	0	0	1
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	1	0	1
S	0	0	0	0	3	0	3
SSW	0	0	0	0	5	2	7
SW	0	1	1	0	1	1	4
WSW	0	0	0	0	2	0	2
W	0	0	0	1	3	3	7
WNW	0	0	0	3	7	4	14
NW	0	0	1	4	8	6	19
NNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0
TOTAL	1	1	2	8	30	16	58

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 0  
Hours of missing stability measurements in all stability classes: 11

# LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: JULY-SEPTEMBER 1995

STABILITY CLASS - EXTREMELY UNSTABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	1	0	1
NNE	0	0	0	0	0	0	0
NE	0	0	1	0	1	0	2
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	2	0	0	0	2
SSE	0	0	1	0	0	0	1
S	0	0	0	0	0	0	0
SSW	0	1	1	1	0	0	3
SW	0	0	0	3	0	0	3
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	1	5	4	2	0	12

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 0  
Hours of missing stability measurements in all stability classes: 1

LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: JULY-SEPTEMBER 1995

STABILITY CLASS - MODERATELY UNSTABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	4	3	2	0	9
NNE	0	1	3	2	1	0	7
NE	0	0	6	3	0	0	9
ENE	0	0	4	1	0	0	5
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	7	0	0	0	7
SSE	0	1	11	1	0	0	13
S	0	3	14	6	3	0	26
SSW	0	4	8	4	0	0	16
SW	0	3	13	8	0	0	24
WSW	0	1	3	5	2	0	11
W	0	1	3	3	4	1	12
WNW	0	1	0	0	5	3	9
NW	0	0	0	0	2	0	2
NNW	0	0	0	5	0	0	5
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	15	76	41	19	4	155

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 1

# LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: JULY-SEPTEMBER 1995

STABILITY CLASS - SLIGHTLY UNSTABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION -----	WIND SPEED (in mph)						TOTAL -----
	0.8-3 -----	4-7 -----	8-12 -----	13-18 -----	19-24 -----	> 24 -----	
N	0	0	4	4	0	0	8
NNE	0	1	5	0	0	0	6
NE	0	1	0	1	1	0	3
ENE	0	0	2	3	1	0	6
E	0	0	3	0	0	0	3
ESE	0	1	3	0	0	0	4
SE	0	4	10	0	0	0	14
SSE	0	4	12	0	0	0	16
S	1	9	3	4	4	1	22
SSW	0	3	8	3	1	1	16
SW	1	15	14	10	2	1	43
WSW	0	4	13	11	1	0	29
W	1	8	8	4	1	5	27
WNW	0	1	0	2	8	1	12
NW	0	0	1	2	5	1	9
NNW	0	0	4	15	0	0	19
VARIABLE	0	0	0	0	0	0	0
TOTAL	3	51	90	59	24	10	237

Hours of calm in this stability class: 0

Hours of missing wind measurements in this stability class: 0

Hours of missing stability measurements in all stability classes: 1

# LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: JULY-SEPTEMBER 1995

STABILITY CLASS - NEUTRAL (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION -----	WIND SPEED (in mph)						TOTAL -----
	0.8-3 -----	4-7 -----	8-12 -----	13-18 -----	19-24 -----	> 24 -----	
N	1	6	13	34	13	1	68
NNE	3	4	2	9	8	0	26
NE	1	2	7	10	1	0	21
ENE	0	6	9	20	4	0	39
E	0	11	12	8	0	0	31
ESE	0	14	21	4	0	0	39
SE	3	10	13	4	0	1	31
SSE	2	7	12	8	7	1	37
S	2	17	10	9	15	14	67
SSW	0	2	12	10	4	6	34
SW	4	7	12	20	11	1	55
WSW	1	11	27	18	5	1	63
W	1	13	9	8	2	5	38
WNW	1	14	13	10	5	2	45
NW	0	7	5	11	6	0	29
NNW	1	7	6	18	4	0	36
VARIABLE	0	0	0	0	0	0	0
TOTAL	20	138	183	201	85	32	659

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 0  
Hours of missing stability measurements in all stability classes: 1

# LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: JULY-SEPTEMBER 1995

STABILITY CLASS - SLIGHTLY STABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	1	2	1	13	5	0	22
NNE	1	3	4	11	4	0	23
NE	1	0	3	8	1	0	13
ENE	3	12	16	10	0	0	41
E	1	5	10	9	7	0	32
ESE	1	2	10	16	3	0	32
SE	0	4	10	16	7	1	38
SSE	0	8	6	9	10	6	39
S	0	11	9	10	9	18	57
SSW	1	4	6	9	15	23	58
SW	0	5	22	20	12	15	74
WSW	3	11	15	15	14	0	58
W	2	4	10	13	7	1	37
WNW	0	3	7	9	6	0	25
NW	0	3	5	8	4	1	21
NNW	0	2	2	6	5	0	15
VARIABLE	0	0	0	0	0	0	0
TOTAL	14	79	136	182	109	65	585

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 5  
Hours of missing stability measurements in all stability classes: 1



# LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: JULY-SEPTEMBER 1995

STABILITY CLASS - MODERATELY STABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	3	3	1	0	9
NNE	1	0	1	1	0	0	3
NE	2	1	2	0	0	0	5
ENE	1	1	1	0	0	0	3
E	0	2	2	0	0	0	4
ESE	1	4	4	8	6	0	23
SE	1	1	9	16	6	2	35
SSE	2	6	8	9	2	5	32
S	0	2	6	17	3	8	36
SSW	0	1	13	20	18	9	61
SW	0	3	12	11	15	12	53
WSW	1	2	7	11	10	6	37
W	3	3	5	14	11	13	49
WNW	3	4	2	6	6	8	29
NW	1	3	4	8	0	0	16
NNW	0	0	3	4	1	0	8
VARIABLE	0	0	0	0	0	0	0
TOTAL	16	35	82	128	79	63	403

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 10  
 Hours of missing stability measurements in all stability classes: 1

LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: JULY-SEPTEMBER 1995

STABILITY CLASS - EXTREMELY STABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	1	0	2	0	3
SE	0	0	0	3	5	2	10
SSE	0	0	4	5	2	5	16
S	0	0	3	3	8	11	25
SSW	0	0	2	10	6	4	22
SW	0	0	3	12	0	3	18
WSW	0	1	3	9	6	8	27
W	0	0	0	1	0	2	3
WNW	0	1	4	2	0	0	7
NW	0	0	4	4	0	0	8
NNW	0	0	0	0	2	0	2
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	2	24	49	31	35	141

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 0  
Hours of missing stability measurements in all stability classes: 1

LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: OCTOBER-DECEMBER 1995

STABILITY CLASS - EXTREMELY UNSTABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	1	0	0	0	1
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	0	1	0	0	0	1

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 1

LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: OCTOBER-DECEMBER 1995

STABILITY CLASS - MODERATELY UNSTABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	1	0	0	0	1
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	0	0	0	1	0	1
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	1	1
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	0	1	0	1	1	3

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 0  
Hours of missing stability measurements in all stability classes: 1

# LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: OCTOBER-DECEMBER 1995

STABILITY CLASS - SLIGHTLY UNSTABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	1	1
S	0	0	0	0	1	0	1
SSW	0	3	2	4	3	5	17
SW	0	2	2	4	5	3	16
WSW	0	0	0	0	0	2	2
W	0	0	0	0	0	4	4
WNW	0	0	0	0	4	2	6
NW	0	0	1	0	8	4	13
NNW	0	0	1	0	0	0	1
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	5	6	8	21	21	61

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 0  
Hours of missing stability measurements in all stability classes: 1

LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: OCTOBER-DECEMBER 1995

STABILITY CLASS - NEUTRAL (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	9	14	15	10	7	55
NNE	0	3	1	0	8	11	23
NE	0	7	18	9	24	3	61
ENE	0	4	23	21	20	15	83
E	1	4	7	10	19	3	44
ESE	2	3	4	2	8	3	22
SE	0	2	2	8	3	3	18
SSE	2	6	3	9	11	7	38
S	0	2	5	8	20	19	54
SSW	1	4	8	11	15	13	52
SW	0	8	4	10	6	5	33
WSW	2	1	2	7	16	20	48
W	0	1	10	25	47	73	156
WNW	0	6	19	47	63	82	217
NW	1	7	29	33	49	21	140
NNW	0	3	20	31	19	11	84
VARIABLE	0	0	0	0	0	0	0
TOTAL	9	70	169	246	338	296	1128

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 1



LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: OCTOBER-DECEMBER 1995

STABILITY CLASS - SLIGHTLY STABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	7	3	11	7	1	29
NNE	2	4	8	4	1	0	19
NE	1	6	3	0	0	0	10
ENE	2	3	5	1	2	0	13
E	1	3	4	4	8	1	21
ESE	1	1	5	6	14	2	29
SE	0	2	8	4	5	3	22
SSE	1	3	6	6	5	18	39
S	0	1	7	5	11	49	73
SSW	1	5	6	7	8	42	69
SW	1	3	8	6	7	20	45
WSW	2	1	3	4	4	12	26
W	1	3	5	7	18	7	41
WNW	0	2	3	17	18	35	75
NW	0	1	6	13	14	6	40
NNW	0	4	14	10	11	0	39
VARIABLE	0	0	0	0	0	0	0
TOTAL	13	49	94	105	133	196	590

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 3  
Hours of missing stability measurements in all stability classes: 1

LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: OCTOBER-DECEMBER 1995

STABILITY CLASS - MODERATELY STABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION -----	WIND SPEED (in mph)						TOTAL -----
	0.8-3 -----	4-7 -----	8-12 -----	13-18 -----	19-24 -----	> 24 -----	
N	1	5	5	10	3	0	24
NNE	0	1	1	2	0	0	4
NE	0	0	1	0	0	0	1
ENE	2	0	0	0	0	0	2
E	0	0	0	4	0	0	4
ESE	0	0	1	3	5	3	12
SE	0	0	0	3	1	2	6
SSE	0	0	3	7	3	5	18
S	0	2	1	2	4	16	25
SSW	0	0	0	2	4	28	34
SW	1	0	3	3	10	11	28
WSW	0	1	7	8	4	2	22
W	1	0	1	2	15	17	36
WNW	0	0	1	7	13	17	38
NW	0	3	6	5	18	3	35
NNW	0	3	4	10	5	0	22
VARIABLE	0	0	0	0	0	0	0
TOTAL	5	15	34	68	85	104	311

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 0  
Hours of missing stability measurements in all stability classes: 1

LASALLE NUCLEAR POWER STATION

PERIOD OF RECORD: OCTOBER-DECEMBER 1995

STABILITY CLASS - EXTREMELY STABLE (DIFF TEMP 375-33 FT)  
WINDS MEASURED AT 375 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.8-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	1	3	1	0	5
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	0	0	0	1	1
SSE	0	0	0	2	2	2	6
S	0	0	0	0	2	12	14
SSW	0	0	0	4	4	8	16
SW	0	1	7	2	8	17	35
WSW	0	1	2	0	1	1	5
W	0	0	0	1	5	1	7
WNW	0	1	1	0	9	0	11
NW	1	0	2	1	4	1	9
NNW	0	0	0	0	1	0	1
VARIABLE	0	0	0	0	0	0	0
TOTAL	1	3	13	13	37	43	110

Hours of calm in this stability class: 0  
Hours of missing wind measurements in this stability class: 0  
Hours of missing stability measurements in all stability classes: 1

APPENDIX III

LISTING OF MISSED SAMPLES

LASALLE

LISTING OF MISSED SAMPLES

Sample Type <sup>a</sup>	Location	Expected Collection Date	Reason
MI	L-20	01-05-95	Animal is dry.
MI	L-20	02-02-95	Animal is dry.
MI	L-39	02-02-95	Went out of business in January, 1995.
MI	L-20	03-02-95	Animal is dry.
MI	L-20	04-06-95	Animal is dry.
AP/I	L-13	04-20-95	No Electricity.
MI	L-20	05-04-95	Animal is dry.
MI	L-20	05-18-95	Animal is dry.
MI	L-20	06-01-95	Animal is dry.
MI	L-20	06-15-95	Animal is dry.
MI	L-20	06-29-95	Animal is dry.
MI	L-38	06-29-95	Went out of business in June, 1995.
MI	L-20	07-13-95	Animal is dry.
MI	L-20	07-27-95	Animal is dry.
MI	L-20	08-10-95	Animal is dry.
MI	L-20	08-23-95	Animal is dry.
AP	L-20	08-30-95	Air particulate filter missing from holder. No apparent evidence of tampering.
MI	L-20	09-06-95	Animal is dry.
MI	L-20	09-20-95	Animal is dry.
MI	L-20	10-04-95	Animal is dry.
MI	L-41	10-04-95	Animal is being used for breeding purposes.
MI	L-20	10-18-95	Animal is dry.
MI	L-41	10-18-95	Animal is dry.
MI	L-41	11-01-95	Animal is dry.
MI	L-41	12-05-95	Animal is dry.
SW	L-21	12-12-95	Illinois River is frozen.
SW	L-40	12-12-95	Illinois River is frozen.

Air Sampling Variances<sup>b</sup>

AP/AI	L-05	03-02-95	Volume estimated.
AP/AI	L-04	03-23-95	Volume estimated.

<sup>a</sup> AP/I = Air Particulate/Air Iodine.

<sup>b</sup> Air Sampling Variances are samples which have not been missed but indicate unusual sample results or factors which contribute to sample anomalies.

# LASALLE

## LISTING OF MISSED SAMPLES

Sample Type <sup>a</sup>	Location	Expected Collection Date	Reason
<u>Air Sampling Variances<sup>b</sup></u> (continued)			
AP/AI	L-04	08-17-95	Volume low; no discernible reason for low volume.
AP/AI	L-04	08-23-95	Volume estimated; installed new timer.
AP/AI	L-05	08-23-95	Volume low; no discernible reason for low volume.
AP/AI	L-02	08-30-95	Volume low; no electricity; replaced blown fuse.
AP/AI	L-06	09-20-95	Volume estimated.
AP/AI	L-05	10-11-95	Flowrate outside 10%.
AP/AI	L-06	11-21-95	Timer malfunction; estimated
AP/AI	L-10	12-19-95	Flowrate outside 10%.

<sup>a</sup> AP/I = Air Particulate/Air Iodine.

<sup>b</sup> Air Sampling Variances are samples which have not been missed but indicate unusual sample results or factors which contribute to sample anomalies.



APPENDIX IV

MILCH ANIMALS, NEAREST LIVESTOCK, AND  
NEAREST RESIDENCES CENSUS

## LASALLE

### MILCH ANIMALS CENSUS, 1995

A. There is only one dairy farm within a 6.5 mile radius of LaSalle County Station.

B. Sampling Locations

L-16 Lowery Dairy Farm  
8.2 miles @ 120°

Number of cows - 105

Diet consists of: ground grain, hay and silage; no pasture

L-19 Robert Bettenhausen Farm  
8.5 miles @ 180°

Number of cows - 50

Diet consists of: 5% or less pasture, ground grain, silage, and hay

L-20 Gass Farm  
4.6 miles @ 348°

Number of cows - 1

Diet consists of: 50% pasture  
25% ground grain  
25% hay

L-41 Burton Farm  
7.5 miles @ 359°

Number of cows - 1

Diet consists of: 50% pasture  
50% feed

LASALLE

MILCH ANIMALS CENSUS, 1995  
(continued)

L-38 Ricker Dairy Farm<sup>a</sup>  
8.2 miles @ 213°

Number of cows - 36

Diet consists of: 50% pasture  
25% ground grain  
25% hay

L-39 Village View Acres Dairy<sup>b</sup>  
10.4 miles @ 232°

Number of cows - 35

Diet consists of: 50% pasture  
25% ground grain  
25% hay

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<sup>a</sup> Ricker Dairy Farm went out of business in June, 1995. Census data is from 1994 Milch Animals Census.

<sup>b</sup> Village View Acres Dairy went out of business in January, 1995. Census data is from 1994 Milch Animals Census.

Census conducted by J. Benham on August 28, 1995.

# LASALLE

## NEAREST LIVESTOCK CENSUS, 1995

Nearest livestock of the LaSalle Station within a 6.5 mile radius.

<u>Sector</u>	<u>Direction</u>	<u>Distance</u>
A	N	4.0 miles
B	NNE	1.7 miles
C	NE	3.5 miles
D	ENE	3.1 miles
E	E	None
F	ESE	None
G	SE	4.7 miles
H	SSE	4.7 miles
J	S	None
K	SSW	None
L	SW	None
M	WSW	None
N	W	3.0 miles
P	WNW	3.0 miles
Q	NW	4.0 miles
R	NNW	4.6 miles

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Census conducted by J. Benham on August 28, 1995.

# LASALLE

## NEAREST RESIDENCE CENSUS, 1995

Nearest resident of the LaSalle Station within a 6.5 mile radius.

<u>Sector</u>	<u>Direction</u>	<u>Distance</u>
A	N	3.9 miles
B	NNE	1.8 miles
C	NE	2.1 miles
D	ENE	3.3 miles
E	E	3.2 miles
F	ESE	1.4 miles
G	SE	1.7 miles
H	SSE	1.8 miles
J	S	1.5 miles
K	SSW	0.7 miles
L	SW	1.0 miles
M	WSW	1.5 miles
N	W	0.8 miles
P	WNW	0.9 miles
Q	NW	1.8 miles
R	NNW	1.7 miles

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Census conducted by J. Benham on August 28, 1995.

## APPENDIX V

### INTERLABORATORY COMPARISON PROGRAM RESULTS



## Appendix V

### Interlaboratory Comparison Program Results

Teledyne Brown Engineering Environmental Services, Midwest Laboratory (formerly Teledyne Isotopes and Hazelton Environmental Services) has participated in interlaboratory comparison (crosscheck) programs since the formulation of its quality control program in December 1971. These programs are operated by agencies which supply environmental type samples (e.g., milk or water) containing concentrations of radionuclides known to the issuing agency but not to participant laboratories. The purpose of such a program is to provide an independent check on the laboratory's analytical procedures and to alert it to any possible problems.

Participant laboratories measure the concentration of specified radionuclides and report them to the issuing agency. Several months later, the agency reports the known values to the participant laboratories and specifies control limits. Results consistently higher or lower than the known values or outside the control limits indicate a need to check the instruments or procedures used.

The results in Table A-1 were obtained through participation in the environmental sample crosscheck program for milk, water, air filters, and food samples during the current year. This program is conducted by the U.S. Environmental Protection Agency Intercomparison and Calibration Section, Quality Assurance Branch, Environmental Monitoring and Support Laboratory, Las Vegas, Nevada.

Table A-2 lists results of the analyses on in-house "spiked" samples.

Table A-3 lists results of the in-house "blank" samples.

Table A-4 lists results of the in-house "duplicate" program.

Out-of-limit results are explained directly below the result.

Table A-1. U.S. Environmental Protection Agency's crosscheck program, comparison of EPA and Teledyne Brown Engineering Environmental Services, Midwest Laboratory results for various sample media<sup>a</sup>.

Lab Code	Sample Type	Date Collected	Analysis	Concentration in pCi/L <sup>b</sup>		
				EPA Result <sup>c</sup> 1s, N=1	Control Limits	TBEESML Results ± 2 Sigma <sup>d</sup>
STW-723	Water	Jan, 1995	Sr-89	20.0 ± 5.0	11.3 - 28.7	17.7 ± 1.5; 2.3
STW-723	Water	Jan, 1995	Sr-90	15.0 ± 5.0	6.3 - 23.7	13.7 ± 0.6; 1.5
STW-724	Water	Jan, 1995	Gr. Alpha	5.0 ± 5.0	0.0 - 13.7	4.3 ± 0.6; 0.8
STW-724	Water	Jan, 1995	Gr. Beta	5.0 ± 5.0	0.0 - 13.7	4.7 ± 0.6; 0.9
STW-725	Water	Feb, 1995	I-131	100.0 ± 10.0	82.7 - 117.3	99.0 ± 4.4; 10.8
STW-726	Water	Feb, 1995	Ra-226	19.1 ± 2.9	14.1 - 24.1	19.2 ± 0.4; 2.0
STW-726	Water	Feb, 1995	Ra-228	20.0 ± 5.0	11.3 - 28.7	19.2 ± 2.0; 2.8
STW-726	Water	Feb, 1995	Uranium	25.5 ± 3.0	20.3 - 30.7	24.9 ± 0.2; 2.5
STW-727	Water	Mar, 1995	H-3	7435.0 ± 744.0	6144.2 - 8725.8	7460.0 ± 87.2; 1018.3
STW-728	Water	Mar, 1995	Pu-239	11.1 ± 1.1	9.2 - 13.0	11.0 ± 0.6; 1.3
STW-729	Water	Apr, 1995	Gr. Alpha	47.5 ± 11.9	26.9 - 68.1	41.7 ± 0.6; 5.1
STW-729	Water	Apr, 1995	Ra-226	14.9 ± 2.2	11.1 - 18.7	13.4 ± 0.5; 1.4
STW-729	Water	Apr, 1995	Ra-228	15.8 ± 4.0	8.9 - 22.7	13.1 ± 2.4; 2.8
STW-729	Water	Apr, 1995	Uranium	10.0 ± 3.0	4.8 - 15.2	9.5 ± 0.6; 1.1
STW-730	Water	Apr, 1995	Co-60	29.0 ± 5.0	20.3 - 37.7	29.0 ± 1.7; 4.5
STW-730	Water	Apr, 1995	Cs-134	20.0 ± 5.0	11.3 - 28.7	17.3 ± 1.2; 2.7
STW-730	Water	Apr, 1995	Cs-137	11.0 ± 5.0	2.3 - 19.7	11.0 ± 1.0; 1.9
STW-730	Water	Apr, 1995	Gr. Beta	86.6 ± 10.0	69.3 - 103.9	74.8 ± 3.2; 11.9
STW-730	Water	Apr, 1995	Sr-89	20.0 ± 5.0	11.3 - 28.7	17.0 ± 0.0; 1.7
STW-730	Water	Apr, 1995	Sr-90	15.0 ± 5.0	6.3 - 23.7	12.7 ± 1.2; 1.7
STW-732	Water	Jun, 1995	Ra-226	14.8 ± 2.2	11.0 - 18.6	14.7 ± 0.3; 1.5
STW-732	Water	Jun, 1995	Ra-228	15.0 ± 3.8	8.4 - 21.6	11.9 ± 0.6; 1.4
STW-732	Water	Jun, 1995	Uranium	15.2 ± 3.0	10.0 - 20.4	13.9 ± 0.3; 1.4
STW-735	Water	Jul, 1995	Gr. Alpha	27.5 ± 6.9	15.5 - 39.5	16.4 ± 2.4; 3.1
STW-735	Water	Jul, 1995	Gr. Beta	19.4 ± 5.0	10.7 - 28.1	16.8 ± 1.0; 2.8
STW-736	Water	Aug, 1995	H-3	4872.0 ± 487.0	4027.1 - 5716.9	4773.7 ± 49.9; 651.1

Table A-1. U.S. Environmental Protection Agency's crosscheck program, comparison of EPA and Teledyne Brown Engineering Environmental Services, Midwest Laboratory results for various sample media<sup>a</sup>.

Lab Code	Sample Type	Date Collected	Analysis	Concentration in pCi/L <sup>b</sup>		
				EPA Result <sup>c</sup> 1s, N=1	Control Limits	TBEESML Results $\pm 2$ Sigma <sup>d</sup>

<sup>a</sup> Results obtained by Teledyne Brown Engineering Environmental Services Midwest Laboratory as a participant in the environmental sample crosscheck program operated by the Intercomparison and Calibration Section, Quality Assurance Branch, Environmental Monitoring and Support Laboratory, U.S. Environmental Protection Agency (EPA), Las Vegas, Nevada.

<sup>b</sup> All results are in pCi/L, except for elemental potassium (K) data in milk, which are in mg/L; air filter samples, which are in pCi/Filter; and food products, which are in mg/Kg.

<sup>c</sup> USEPA results are presented as the known values and expected laboratory precision (1s, 1 determination) and control limits as defined by the EPA.

<sup>d</sup> Unless otherwise indicated, the TBEESML results are given as the mean  $\pm 2$  standard deviations for three determinations. The numbers after the semi-colon are the Total Propagated Uncertainty of the result.

Table A-2. In-house "spike" samples.

Lab Code	Sample Type	Date Collected	Analysis	Accepted Rejected	Concentration in pCi/L <sup>a</sup>		
					Known Activity	Control Limits <sup>b</sup>	TBEESML Results 2s, n=1 <sup>c</sup>
SPMI-205	Milk	Jan, 1995	Cs-137	A	49.4	35.4 - 63.4	51.2 ± 7.5; 9.1
SPMI-205	Milk	Jan, 1995	Sr-89	A	23.1	16.9 - 29.4	19.4 ± 3.4; 3.9
SPMI-205	Milk	Jan, 1995	Sr-90	A	28.1	22.4 - 33.9	26.2 ± 1.3; 2.9
SPAP-284	Air Filter	Jan, 1995	Cs-137	A	1.9	1.5 - 2.3	2.2 ± 0.0; 0.2
SPAP-284	Air Filter	Jan, 1995	I-131(g)	A	1.9	1.5 - 2.3	2.2 ± 0.0; 0.2
SPW-286	Water	Jan, 1995	H-3	A	40871.0	29852.0 - 51890.0	40929.9 ± 5594.5; 6931.9
SPW-289	Water	Jan, 1995	Co-60	A	247.5	194.0 - 301.0	250.5 ± 14.1; 28.7
SPW-289	Water	Jan, 1995	Cs-134	A	321.3	256.7 - 385.9	290.5 ± 14.4; 32.4
SPW-289	Water	Jan, 1995	Cs-137	A	394.3	310.7 - 477.9	387.7 ± 21.2; 44.2
SPAP-408	Air Filter	Jan, 1995	Gr. Beta	A	8.1	6.6 - 9.7	7.5 ± 0.0; 0.7
SPMI-707	Milk	Jan, 1995	I-131	A	86.0	69.3 - 102.7	80.3 ± 1.4; 8.1
SPMI-707	Milk	Jan, 1995	I-131(g)	A	86.0	64.0 - 108.0	84.8 ± 10.4; 13.4
SPCH-717	Charcoal Canister	Jan, 1995	I-131(g)	A	2.5	1.9 - 3.0	2.9 ± 0.1; 0.3
SPVE-729	Vegetation	Feb, 1995	I-131(g)	A	1.9	1.5 - 2.3	1.9 ± 0.1; 0.2
SPW-1204	Water	Feb, 1995	Ra-226	A	6.9	5.5 - 8.3	6.9 ± 0.1; 0.7
SPW-1790	Water	Mar, 1995	Sr-89	R	42.7	34.5 - 50.9	0.9 ± 3.9; 3.9
The raw data was reviewed and found to be free of errors. The sample was repeated with similar results. An Investigation was conducted to determine the cause of this deviation. No apparent cause was found for this discrepancy. It was determined the "spike" was prepared improperly. Another "spike" was prepared and analyzed (See SPW-6388). No further action is planned.							
SPW-1790	Water	Mar, 1995	Sr-90	R	39.1	31.6 - 46.6	31.4 ± 1.8; 3.6
The raw data was reviewed and found to be free of errors. The sample was repeated with similar results. An Investigation was conducted to determine the cause of this deviation. No apparent cause was found for this discrepancy. It was determined the "spike" was prepared improperly. Another "spike" was prepared and analyzed (See SPW-6388). No further action is planned.							
SPW-3051	Water	Mar, 1995	Gr. Alpha	A	82.9	65.0 - 100.8	88.5 ± 3.7; 9.6
SPW-3051	Water	Mar, 1995	Gr. Beta	A	87.2	69.9 - 104.5	83.0 ± 2.3; 8.6
SPAP-2513	Air Filter	Apr, 1995	Gr. Beta	A	8.1	6.5 - 9.7	7.5 ± 0.0; 0.8
SPAP-2542	Air Filter	Apr, 1995	Cs-137	A	1.9	-0.3 - 4.2	2.3 ± 2.1; 2.1
SPW-2544	Water	Apr, 1995	H-3	A	9333.0	7391.0 - 11275.0	9656.2 ± 291.8; 1008.7
SPW-2652	Water	Apr, 1995	Co-60	A	24.8	18.9 - 30.7	23.8 ± 2.4; 3.4
SPW-2652	Water	Apr, 1995	Cs-134	A	30.8	24.0 - 37.6	29.3 ± 2.3; 3.7
SPW-2652	Water	Apr, 1995	Cs-137	A	40.9	31.1 - 50.7	42.3 ± 3.9; 5.8
SPMI-2988	Milk	Apr, 1995	Cs-134	A	40.7	32.5 - 48.9	37.0 ± 1.8; 4.1
SPMI-2988	Milk	Apr, 1995	Cs-137	A	54.5	42.1 - 67.0	62.4 ± 3.1; 7.0

Table A-2. In-house "spike" samples.

Lab Code	Sample Type	Date Collected	Analysis	Accepted Rejected	Concentration in pCi/L <sup>a</sup>		
					Known Activity	Control Limits <sup>b</sup>	TBEESML Results 2s, n=1 <sup>c</sup>
SPMI-2988	Milk	Apr, 1995	Sr-89	A	36.5	28.2 - 44.8	32.6 ± 3.3; 4.6
SPMI-2988	Milk	Apr, 1995	Sr-90	A	24.9	19.4 - 30.4	25.6 ± 1.6; 3.0
SPW-3051	Water	Apr, 1995	Gr. Alpha	A	82.9	65.0 - 100.8	88.0 ± 3.8; 9.6
SPW-3051	Water	Apr, 1995	Gr. Beta	A	87.2	70.2 - 104.2	79.6 ± 2.3; 8.3
SPW-3589	Water	May, 1995	Fe-55	A	2274.0	1506.6 - 3041.4	2033.7 ± 500.2; 540.0
SPF-3708	Fish	May, 1995	Cs-134	A	0.1	0.1 - 0.2	0.1 ± 0.0; 0.0
SPF-3708	Fish	May, 1995	Cs-137	A	0.2	0.1 - 0.2	0.2 ± 0.0; 0.0
SPW-6008	Water	May, 1995	Gr. Alpha	A	20.7	16.4 - 25.0	17.3 ± 1.4; 2.2
SPW-6008	Water	May, 1995	Gr. Beta	A	21.8	17.3 - 26.3	21.2 ± 1.0; 2.3
SPSO-5130	Soil	May, 1995	Cs-134	A	0.3	0.2 - 0.3	0.3 ± 0.0; 0.0
SPSO-5130	Soil	May, 1995	Cs-137	A	0.5	0.4 - 0.6	0.5 ± 0.0; 0.1
SPW-6388	Water	May, 1995	Sr-89	A	21.2	16.0 - 26.4	18.7 ± 2.4; 3.0
SPW-6388	Water	May, 1995	Sr-90	A	23.2	18.5 - 27.9	21.2 ± 1.1; 2.4
SPW-6398	Water	May, 1995	Sr-89	A	21.2	16.1 - 26.3	18.7 ± 2.4; 3.0
SPW-6398	Water	May, 1995	Sr-90	A	23.2	18.5 - 27.9	21.2 ± 1.1; 2.4
SPW-5608	Water	Jun, 1995	I-131	A	85.5	68.7 - 102.3	78.8 ± 2.3; 8.2
SPCH-596	Charcoal Canister	Jun, 1995	I-131(g)	A	2.3	1.9 - 2.8	2.2 ± 0.1; 0.2
SPW-6005	Water	Jun, 1995	I-131	A	46.8	36.9 - 56.7	48.2 ± 1.9; 5.2
SPVF-6006	Vegetation	Jun, 1995	I-131(g)	A	0.5	0.4 - 0.7	0.6 ± 0.0; 0.1
SPMI-6838	Milk	Jun, 1995	I-131	A	39.6	31.8 - 47.4	38.5 ± 0.5; 3.9
SPW-6839	Water	Jun, 1995	I-131	A	39.5	32.0 - 47.0	34.9 ± 0.5; 3.5
SPVE-7190	Vegetation	Jul, 1995	I-131(g)	A	1.0	0.8 - 1.2	1.1 ± 0.0; 0.1
SPMI-7525	Milk	Jul, 1995	Cs-134	A	34.4	26.9 - 41.9	31.5 ± 2.5; 4.0
SPMI-7525	Milk	Jul, 1995	Cs-137	A	43.4	32.7 - 54.1	50.2 ± 4.0; 6.4
SPMI-7525	Milk	Jul, 1995	I-131(g)	A	45.6	34.1 - 57.1	44.7 ± 5.4; 7.0
SPMI-7525	Milk	Jul, 1995	Sr-90	A	27.9	22.0 - 33.8	28.0 ± 1.4; 3.1
SPAP-7554	Air Filter	Jul, 1995	Gr. Beta	A	8.1	6.5 - 9.6	7.3 ± 0.0; 0.7
SPAP-7557	Air Filter	Jul, 1995	Cs-137	A	1.9	1.5 - 2.3	2.3 ± 0.0; 0.2
SPW-7569	Water	Jul, 1995	H-3	A	26669.0	21382.9 - 31955.1	25806.9 ± 447.7; 2619.2
SPW-8179	Water	Jul, 1995	Fe-55	A	2.1	1.4 - 2.9	2.3 ± 0.4; 0.5
SPW-9981	Water	Sep, 1995	Sr-89	A	39.0	29.1 - 48.9	34.6 ± 4.9; 6.0
SPW-9981	Water	Sep, 1995	Sr-90	A	20.0	15.6 - 24.4	20.3 ± 1.3; 2.4
SPMI-1091	Milk	Oct, 1995	Cs-134	A	27.8	20.2 - 35.4	27.9 ± 3.9; 4.8
SPMI-1091	Milk	Oct, 1995	Cs-137	A	43.1	30.2 - 56.1	52.3 ± 6.9; 8.7
SPMI-1091	Milk	Oct, 1995	I-131	A	73.4	58.9 - 87.8	70.9 ± 0.8; 7.1



Table A-2. In-house "spike" samples.

Lab Code	Sample Type	Date Collected	Analysis	Accepted Rejected	Concentration in pCi/L <sup>a</sup>		
					Known Activity	Control Limits <sup>b</sup>	TBESML Results 2s, n=1 <sup>c</sup>
SPMI-1091	Milk	Oct, 1995	I-131(g)	A	73.4	55.0 - 91.7	77.1 ± 7.9; 11.0
SPF-10921	Fish	Oct, 1995	Co-60	A	0.8	0.6 - 0.9	0.7 ± 0.0; 0.1
SPF-10921	Fish	Oct, 1995	Cs-134	A	0.6	0.4 - 0.7	0.5 ± 0.0; 0.1
SPF-10921	Fish	Oct, 1995	Cs-137	A	0.9	0.7 - 1.1	0.9 ± 0.1; 0.1
SPCH-112	Charcoal Canister	Oct, 1995	I-131(g)	A	0.8	0.6 - 1.0	0.8 ± 0.0; 0.1
SPAP-109	Air Filter	Nov, 1995	Gr. Beta	A	8.0	6.5 - 9.5	7.3 ± 0.0; 0.7
SPW-1207	Water	Nov, 1995	H-3	A	29315.0	23551.9 - 35078.1	27963.4 ± 445.5; 2831.6
SPW-1208	Water	Nov, 1995	Co-60	A	23.0	17.8 - 28.2	22.0 ± 1.9; 2.9
SPW-1208	Water	Nov, 1995	Cs-134	A	41.7	33.2 - 50.2	38.1 ± 2.0; 4.3
SPW-1208	Water	Nov, 1995	Cs-137	A	24.3	17.8 - 30.8	27.2 ± 3.0; 4.0
SPW-1208	Water	Nov, 1995	Gr. Alpha	A	82.8	66.3 - 99.3	75.3 ± 3.2; 8.2
SPW-1208	Water	Nov, 1995	Gr. Beta	A	86.3	68.6 - 104.0	86.9 ± 2.5; 9.0
SPW-1280	Water	Dec, 1995	Gr. Alpha	A	20.7	15.1 - 26.3	19.6 ± 3.0; 3.6
SPW-1280	Water	Dec, 1995	Gr. Beta	A	21.6	16.7 - 26.5	21.0 ± 1.8; 2.8

<sup>a</sup> All results are in pCi/L, except for elemental potassium (K) data in milk, which are in mg/L; air filter samples, which are in pCi/Filter; and food products, which are in mg/Kg.

<sup>b</sup> Control limits are based on the known value ± 10%+TPU (Where all parametric uncertainties, other than counting statistics, are less than 5%).

<sup>c</sup> All samples are the results of single determinations. The result is reported in the following format: Activity ± Counting Error ; Total Propagated Uncertainty.

NOTE: For fish, Jello is used for the spike matrix. For vegetation, Sawdust is used for the spike matrix.



Table A-3. In-house "blank" samples.

Lab Code	Sample Type	Sample Date	Analysis	Concentration pCi/L <sup>a</sup>		
				Teledyne Results (4.66 Sigma)		Acceptance Criteria (4.66 Sigma)
				LLD	Activity <sup>b</sup>	
SPM-204	Milk	Jan 1995	Co-60	<5.3	0.41 ± 3.48; 3.48	< 10.0
SPM-204	Milk	Jan 1995	Cs-134	<4.4	-0.07 ± 2.05; 2.05	< 10.0
SPM-204	Milk	Jan 1995	Cs-137	<4.3	1.32 ± 2.53; 2.54	< 10.0
SPM-204	Milk	Jan 1995	I-131	<0.5	-0.03 ± 0.22; 0.22	< 0.5
SPM-204	Milk	Jan 1995	Sr-89	<0.8	0.14 ± 1.08; 1.08	< 5.0
SPM-204	Milk	Jan 1995	Sr-90	N/A	1.46 ± 0.48; 0.50	< 1.0
Low level of Sr-90 concentration in milk (1-5 pCi/L) is not unusual.						
SPAP-283	Air Filter	Jan 1995	Co-60	<2.7	-0.36 ± 1.40; 1.40	< 10.0
SPAP-283	Air Filter	Jan 1995	Cs-134	<1.5	-0.67 ± 1.33; 1.33	< 10.0
SPAP-283	Air Filter	Jan 1995	Cs-137	<2.4	0.46 ± 1.33; 1.33	< 10.0
SPW-285	Water	Jan 1995	H-3	<165.0	-48.53 ± 84.76; 85.01	< 200.0
SPCH-287	Charcoal Canister	Jan 1995	I-131(g)	<2.3	-1.98 ± 3.12; 3.13	< 9.6
SPW-288	Water	Jan 1995	Co-60	<2.2	-0.11 ± 2.02; 2.02	< 10.0
SPW-288	Water	Jan 1995	Cs-134	<3.5	-0.19 ± 2.61; 2.61	< 10.0
SPW-288	Water	Jan 1995	Cs-137	<4.7	0.98 ± 2.54; 2.54	< 10.0
SPAP-409	Air Filter	Jan 1995	Gr. Beta	<0.5	0.02 ± 0.28; 0.28	< 3.2
SPVE-728	Vegetation	Jan 1995	I-131(g)	<12.0	2.33 ± 7.54; 7.55	< 20.0
SPW-957	Water	Feb 1995	Co-60	<3.7	-1.25 ± 3.02; 3.03	< 10.0
SPW-957	Water	Feb 1995	Cs 134	<5.2	0.76 ± 2.77; 2.77	< 10.0
SPW-957	Water	Feb 1995	Cs-137	<3.6	-1.38 ± 2.65; 2.66	< 10.0
SPW-1106	Water	Feb 1995	Ni-63	<12.0	0.25 ± 6.31; 6.31	< 20.0
SPW-3052	Water	Mar 1995	Gr. Alpha	<0.6	0.49 ± 0.43; 0.44	< 1.0
SPW-3052	Water	Mar 1995	Gr. Beta	<1.4	3.05 ± 0.98; 1.09	< 3.2
SPAP-2514	Air Filter	Apr 1995	Gr. Beta	<0.3	0.03 ± 0.25; 0.25	< 3.2
SPAP-2543	Air Filter	Apr 1995	Co-60	<4.4	0.39 ± 2.20; 2.20	< 10.0
SPAP-2543	Air Filter	Apr 1995	Cs-134	<1.9	0.05 ± 2.11; 2.11	< 10.0
SPAP-2543	Air Filter	Apr 1995	Cs-137	<1.1	-1.24 ± 1.83; 1.83	< 10.0
SPW-2545	Water	Apr 1995	H-3	<169	97.76 ± 88.37; 89.36	< 200.0
SPW-2651	Water	Apr 1995	Co-60	<3.17	-1.08 ± 2.45; 2.45	< 10.0
SPW-2651	Water	Apr 1995	Cs-134	<3.32	0.29 ± 2.57; 2.57	< 10.0
SPW-2651	Water	Apr 1995	Cs-137	<3.56	-0.92 ± 2.64; 2.64	< 10.0
SPMI-2987	Milk	Apr 1995	Cs-134	<3.4	0.37 ± 1.89; 1.89	< 10.0
SPMI-2987	Milk	Apr 1995	Cs-137	<3.3	1.29 ± 1.75; 1.76	< 10.0
SPMI-2987	Milk	Apr 1995	Sr-89	<0.4	0.06 ± 0.62; 0.62	< 5.0

Table A-3. In-house "blank" samples.

Lab Code	Sample Type	Sample Date	Analysis	Concentration pCi/L <sup>a</sup>		Acceptance Criteria (4.66 Sigma)
				Teledyne Results (4.66 Sigma)		
				LLD	Activity <sup>b</sup>	
SPMI-2987	Milk	Apr 1995	Sr-90	N/A	1.47 ± 0.38; 0.40	< 1.0
Low level of Sr-90 concentration in milk (1-5 pCi/L) is not unusual.						
SPW-3052	Water	Apr 1995	Gr. Alpha	<0.7	0.23 ± 0.47; 0.47	< 1.0
SPW-3052	Water	Apr 1995	Gr. Beta	<1.7	-0.02 ± 1.09; 1.09	< 3.2
SPW-3590	Water	May 1995	Fe-55	<602.0	0.00 ± 365.40; 365.40	< 1000.0
SPF-3709	Fish	May 1995	Co-60	<8.4	2.21 ± 5.97; 5.98	< 10.0
SPF-3709	Fish	May 1995	Cs-134	<1.3	6.79 ± 8.55; 8.60	< 10.0
SPF-3709	Fish	May 1995	Cs-137	<1.3	3.61 ± 7.81; 7.83	< 10.0
SPSO-5131	Soil	May 1995	Cs-134	<0.034	0.01 ± 0.01; 0.01	< 10.0
SPSO-5131	Soil	May 1995	Cs-137	<0.012	0.00 ± 0.01; 0.01	< 10.0
SPCH-5975	Charcoal Canister	Jun 1995	I-131(g)	<3.0	-0.71 ± 2.68; 2.69	< 9.6
SPVE-6007	Vegetation	Jun 1995	I-131(g)	<0.009	0.00 ± 0.01; 0.01	< 20.0
SPW-6011	Water	Jun 1995	I-131	<0.4	-0.03 ± 0.19; 0.19	< 0.5
SPVE-7191	Vegetation	Jul 1995	I-131(g)	<0.005	-0.00 ± 0.00; 0.00	< 20.0
SPMI-7526	Milk	Jul 1995	Co-60	<5.8	1.19 ± 3.34; 3.34	< 10.0
SPMI-7526	Milk	Jul 1995	Cs-134	<5.1	0.48 ± 2.76; 2.76	< 10.0
SPMI-7526	Milk	Jul 1995	Cs-137	<3.7	0.98 ± 2.39; 2.39	< 10.0
SPMI-7526	Milk	Jul 1995	I-131	<0.5	0.00 ± 0.23; 0.23	< 0.5
SPMI-7526	Milk	Jul 1995	Sr-89	<0.6	-0.19 ± 0.82; 0.82	< 5.0
SPMI-7526	Milk	Jul 1995	Sr-90	N/A	1.35 ± 0.36; 0.39	< 1.0
Low level of Sr-90 concentration in milk (1-5 pCi/L) is not unusual.						
SPAP-7556	Air Filter	Jul 1995	Gr. Beta	<1.0	0.06 ± 0.55; 0.55	< 3.2
SPAP-7558	Air Filter	Jul 1995	Co-60	<4.2	0.39 ± 3.06; 3.06	< 10.0
SPAP-7558	Air Filter	Jul 1995	Co-60	<4.2	0.04 ± 3.07; 3.07	< 10.0
SPAP-7558	Air Filter	Jul 1995	Cs-134	<3.0	-1.23 ± 2.45; 2.45	< 10.0
SPAP-7558	Air Filter	Jul 1995	Cs-137	<3.5	1.18 ± 2.04; 2.04	< 10.0
SPW-7570	Water	Jul 1995	H-3	<164	51.58 ± 83.71; 84.01	< 200.0
SPW-8180	Water	Jul 1995	Fe-55	<0.4	0.00 ± 0.27; 0.27	< 1000.0
SPW-8931	Water	Aug 1995	Ra-228	<1.0	0.58 ± 0.61; 0.61	< 1.0
SPW-9982	Water	Sep 1995	Sr-89	<0.8	0.52 ± 0.76; 0.76	< 5.0
SPW-9982	Water	Sep 1995	Sr-90	<0.4	0.21 ± 0.21; 0.22	< 1.0
SPMI-10920	Milk	Oct 1995	Co-60	<3.8	-0.45 ± 5.05; 5.05	< 10.0
SPMI-10920	Milk	Oct 1995	Cs-134	<3.5	-2.79 ± 4.35; 4.37	< 10.0
SPMI-10920	Milk	Oct 1995	Cs-137	<6.0	1.55 ± 4.13; 4.14	< 10.0

Table A-3. In-house "blank" samples.

Lab Code	Sample Type	Sample Date	Analysis	Concentration pCi/L <sup>a</sup> .		Acceptance Criteria (4.66 Sigma)
				Teledyne Results (4.66 Sigma)		
				LLD	Activity <sup>b</sup>	
SPMI-10920	Milk	Oct 1995	I-131	<0.4	0.10±0.19;0.19	<0.5
SPF-10922	Fish	Oct 1995	Co-60	<5.4	5.74±4.70;4.76	<10.0
SPF-10922	Fish	Oct 1995	Cs-134	<8.9	2.47±5.44;5.45	<10.0
SPF-10922	Fish	Oct 1995	Cs-137	<5.4	-2.44±5.08;5.09	<10.0
SPSO-11225	Soil	Oct 1995	Cs-134	<0.034	0.00±0.02;0.02	<10.0
SPSO-11225	Soil	Oct 1995	Cs-137	<0.019	-0.00±0.01;0.01	<10.0
SPCH-11238	Charcoal Canister	Oct 1995	I-131(g)	<1.9	-0.00±0.01;0.01	<9.6
SPAP-10968	Air Filter	Nov 1995	Gr. Beta	<0.4	0.61±0.26;0.26	<3.2
SPW-12080	Water	Nov 1995	H-3	<149	23.01±74.94;75.01	<200.0
SPW-12082	Water	Nov 1995	Co-60	<2.1	0.62±1.13;1.13	<10.0
SPW-12082	Water	Nov 1995	Cs-134	<1.9	0.02±1.28;1.28	<10.0
SPW-12082	Water	Nov 1995	Cs-137	<2.4	1.53±1.22;1.24	<10.0
SPW-12082	Water	Nov 1995	Gr. Alpha	<0.6	0.19±0.43;0.43	<1.0
SPW-12082	Water	Nov 1995	Gr. Beta	<1.7	0.06±1.11;1.11	<3.2
SPW-12808	Water	Dec 1995	Gr. Alpha	<1.0	0.08±0.49;0.49	<1.0
SPW-12808	Water	Dec 1995	Gr. Beta	<1.6	-0.53±0.78;0.78	<3.2
SPCH-608	Charcoal Canister	Feb 1996	I-131(g)	<2.7	-0.10±1.63;1.63	<9.6

<sup>a</sup> Liquid sample results are reported in pCi/Liter, air filter sample results are in pCi/filter, charcoal sample results are in pCi/charcoal, and solid sample results are in pCi/kilogram.

<sup>b</sup> The activity reported is the net activity result.

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Jan, 1995	Gr. Beta	Ww-62, 63	A	1.4±0.4;0.5	1.3±0.4;0.4
Jan, 1995	H-3	Ww-62, 63	A	22.6±80.9;80.9	18.8±80.7;80.8
Jan, 1995	Gr. Alpha	Ww-41, 42	A	5.1±2.5;2.6	2.5±2.2;2.2
Jan, 1995	Gr. Beta	Ww-41, 42	A	4.7±0.8;1.1	5.0±0.9;1.2
Jan, 1995	H-3	Ww-41, 42	A	30.1±81.2;81.3	-47.0±77.8;78.0
Jan, 1995	K-40	Ww-41, 42	A	1.4±0.2;0.2	1.7±0.3;0.3
Jan, 1995	Sr-89	Ww-41, 42	A	-0.3±0.6;0.6	-0.1±0.5;0.5
Jan, 1995	Sr-90	Ww-41, 42	A	0.2±0.3;0.3	0.1±0.2;0.2
Jan, 1995	Be-7	Cf-20, 21	A	0.4±0.1;0.1	0.5±0.1;0.1
Jan, 1995	Gr. Beta	Cf-20, 21	A	2.9±0.1;0.3	3.0±0.1;0.3
Jan, 1995	K-40	Cf-20, 21	A	4.1±0.3;0.5	3.8±0.3;0.5
Jan, 1995	Sr-89	Cf-20, 21	A	0.0±0.0;0.0	0.0±0.0;0.0
Jan, 1995	Sr-90	Cf-20, 21	A	0.0±0.0;0.0	0.0±0.0;0.0
Jan, 1995	Gr. Beta	Cw-105, 106	A	5.4±1.0;1.1	6.2±1.0;1.2
Jan, 1995	Gr. Beta	Cw-105, 106	A	0.0±0.4;0.4	0.1±0.4;0.4
Jan, 1995	Co-60	Mi-83, 84	A	-0.3±2.5;2.5	0.7±2.2;2.2
Jan, 1995	Cs-137	Mi-83, 84	A	-1.1±2.3;2.3	0.1±1.9;1.9
Jan, 1995	I-131(G)	Mi-83, 84	A	-1.9±3.2;3.2	1.5±2.5;2.5
Jan, 1995	I-131	Mi-187, 188	A	0.1±0.3;0.3	0.3±0.4;0.4
Jan, 1995	K-40	Mi-187, 188	A	1,573.0±138.0;254.6	1,426.0±177.0;262.6
Jan, 1995	H-3	Sw-213, 214	A	5,939.6±241.2;843.0	6,091.2±232.8;860.5
Jan, 1995	H-3	Ww-240, 241	A	39.8±80.3;80.5	10.0±78.9;79.0
Jan, 1995	H-3	Ww-316, 317	A	17,618.0±377.0;2,425.5	17,390.0±381.0;2,395.5
Jan, 1995	Co-60	Mi-295, 296	A	-1.1±2.4;2.4	0.3±2.8;2.8
Jan, 1995	Cs-134	Mi-295, 296	A	-0.6±1.8;1.8	0.8±2.4;2.4
Jan, 1995	Cs-137	Mi-295, 296	A	0.5±1.8;1.8	1.3±2.7;2.7
Jan, 1995	I-131	Mi-295, 296	A	0.1±0.3;0.3	0.2±0.3;0.3
Jan, 1995	I-131(g)	Mi-295, 296	A	-0.4±2.4;2.4	-0.0±4.3;4.3
Jan, 1995	K-40	Mi-295, 296	A	1,449.1±91.2;217.2	1,311.8±108.0;208.5
Jan, 1995	La-140	Mi-295, 296	A	0.6±1.7;1.7	-1.2±2.5;2.5
Jan, 1995	Sr-89	Mi-295, 296	A	0.2±0.8;0.8	0.2±0.9;0.9
Jan, 1995	Sr-90	Mi-295, 296	A	1.4±0.4;0.4	1.6±0.4;0.5
Jan, 1995	Gr. Beta	Lw-609, 610	A	2.6±0.7;0.8	1.7±0.7;0.7
Jan, 1995	Co-60	Lw-344, 345	A	-0.2±1.9;1.9	1.5±3.1;3.1
Jan, 1995	Cs-137	Lw-344, 345	A	0.4±1.9;1.9	-0.2±3.0;3.0
Jan, 1995	Gr. Beta	Lw-344, 345	A	3.3±0.9;1.1	3.4±0.9;1.1

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Jan, 1995	I-131	Mi-374, 375	A	-0.1±0.2;0.2	-0.1±0.3;0.3
Jan, 1995	K-40	Mi-374, 375	A	1,250.0±150.0;226.7	1,286.5±141.0;224.7
Jan, 1995	Gr. Beta	Sw-463, 464	A	1.9±0.6;0.7	1.9±0.6;0.7
Jan, 1995	H-3	Sw-463, 464	A	35.6±80.3;80.5	7.5±79.0;79.0
Jan, 1995	Gr. Alpha	Wwu-860, 861	A	0.3±0.6;0.6	0.2±0.3;0.3
Jan, 1995	Gr. Beta	Wwu-860, 861	A	0.8±1.3;1.3	1.8±1.4;1.4
Jan, 1995	K-40	Wwu-860, 861	A	61.8±32.9;33.5	71.0±36.2;36.9
Jan, 1995	Co-60	Sw-586, 587	A	-2.2±2.3;2.3	1.9±2.8;2.8
Jan, 1995	Cs-137	Sw-586, 587	A	0.6±2.3;2.3	1.5±2.9;2.9
Jan, 1995	H-3	Ww-547, 548	A	602.6±102.9;131.6	619.6±103.6;133.5
Jan, 1995	Gr. Beta	Swt-715, 716	A	2.3±0.6;0.7	2.3±0.5;0.6
Feb, 1995	Gr. Beta	Sw-694, 695	A	3.9±0.7;1.0	4.2±0.8;1.0
Feb, 1995	H-3	Ww-736, 737	A	9,951.9±284.3;1,383.0	10,200.8±287.5;1,416.8
Feb, 1995	H-3	Ww-763, 764	A	584.4±101.1;128.6	707.1±105.5;142.8
Feb, 1995	I-131	Mi-881, 882	A	0.2±0.3;0.3	0.2±0.3;0.3
Feb, 1995	K-40	Mi-881, 882	A	1,340.4±164.0;245.2	1,492.0±101.0;226.7
Feb, 1995	Co-60	Mi-838, 839	A	1.0±2.7;2.7	-0.5±3.8;3.8
Feb, 1995	Cs-134	Mi-838, 839	A	-0.1±2.3;2.3	-1.4±3.1;3.1
Feb, 1995	Cs-137	Mi-838, 839	A	-0.4±2.6;2.6	-0.4±3.1;3.1
Feb, 1995	I-131	Mi-838, 839	A	0.1±0.2;0.2	0.1±0.2;0.2
Feb, 1995	I-131(g)	Mi-838, 839	A	-0.3±2.6;2.6	-0.6±3.2;3.2
Feb, 1995	K-40	Mi-838, 839	A	1,298.6±99.4;202.7	1,232.5±125.0;209.1
Feb, 1995	Sr-89	Mi-838, 839	A	0.5±0.6;0.6	0.5±0.6;0.6
Feb, 1995	Sr-90	Mi-838, 839	A	0.8±0.3;0.3	0.8±0.3;0.3
Feb, 1995	I-131	Mi-937, 938	A	-0.0±0.2;0.2	-0.0±0.2;0.2
Feb, 1995	K-40	Mi-937, 938	A	1,451.8±69.6;209.4	1,456.6±141.0;243.2
Feb, 1995	H-3	Sw-904, 905	A	640.3±104.6;136.1	597.4±103.0;131.2
Feb, 1995	I-131	Mi-1216, 1217	A	0.3±0.3;0.3	0.1±0.3;0.3
Feb, 1995	K-40	Mi-1216, 1217	A	1,583.0±131.0;252.0	1,493.6±174.0;267.5
Feb, 1995	H-3	Sw-1237, 1238	A	55.4±97.4;97.7	4.9±95.4;95.4
Feb, 1995	H-3	Sw-1264, 1265	A	67.1±81.2;81.7	109.3±83.1;84.5
Feb, 1995	Be-7	G-1343, 1344	A	11.4±0.3;1.2	11.9±0.3;1.2
Feb, 1995	K-40	G-1343, 1344	A	3.0±0.2;0.4	3.0±0.2;0.4
Feb, 1995	Co-60	Sw-1494, 1495	A	-2.2±4.1;4.1	0.1±3.4;3.4
Feb, 1995	Cs-137	Sw-1494, 1495	A	3.5±3.7;3.7	0.2±3.6;3.6
Feb, 1995	H-3	Sw-1367, 1368	A	560.3±103.1;128.2	606.1±104.8;133.3



Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Feb, 1995	H-3	Ww-1394, 1395	A	47.9±80.2;80.4	-24.9±76.6;76.7
Feb, 1995	Gr. Beta	Swt-1515, 1516	A	2.4±0.5;0.6	1.7±0.5;0.6
Feb, 1995	H-3	Ww-1536, 1537	A	2,874.3±167.5;425.3	2,924.1±168.6;431.9
Mar, 1995	H-3	Ww-1563, 1564	A	33.5±82.7;82.8	39.5±83.0;83.1
Mar, 1995	Co-60	Ww-1618, 1619	A	2.8±1.5;1.6	2.2±4.6;4.6
Mar, 1995	Cs-137	Ww-1618, 1619	A	-0.9±1.7;1.7	-2.5±3.2;3.2
Mar, 1995	H-3	Ww-1618, 1619	A	4,333.0±204.0;623.6	4,457.0±206.0;640.2
Mar, 1995	Co-60	Mi-1663, 1664	A	2.0±3.2;3.3	-1.5±2.7;2.7
Mar, 1995	Cs-134	Mi-1663, 1664	A	0.2±2.8;2.8	-1.1±2.1;2.1
Mar, 1995	Cs-137	Mi-1663, 1664	A	-0.1±2.7;2.7	0.9±2.4;2.4
Mar, 1995	I-131	Mi-1663, 1664	A	0.1±0.3;0.3	0.2±0.3;0.3
Mar, 1995	I-131(g)	Mi-1663, 1664	A	-0.4±3.7;3.7	0.1±3.4;3.4
Mar, 1995	K-40	Mi-1663, 1664	A	1,592.1±124.0;249.5	1,555.6±118.0;242.2
Mar, 1995	La-140	Mi-1663, 1664	A	-1.7±3.1;3.1	-0.2±2.7;2.7
Mar, 1995	Sr-89	Mi-1663, 1664	A	0.6±0.7;0.7	0.6±0.7;0.7
Mar, 1995	Sr-90	Mi-1663, 1664	A	1.4±0.4;0.4	1.5±0.5;0.5
Mar, 1995	Gr. Beta	Ww-1684, 1685	A	4.9±0.7;1.1	5.0±0.7;1.1
Mar, 1995	H-3	Ww-1684, 1685	A	81.7±84.9;85.6	85.7±85.1;85.9
Mar, 1995	Co-58	Lw-1707, 1708	A	0.4±3.0;3.0	0.0±2.9;2.9
Mar, 1995	Co-60	Lw-1707, 1708	A	1.1±2.9;2.9	1.5±2.7;2.7
Mar, 1995	Cs-134	Lw-1707, 1708	A	-1.9±3.1;3.1	-1.5±2.8;2.8
Mar, 1995	Cs-137	Lw-1707, 1708	A	2.6±3.0;3.0	-1.4±2.5;2.5
Mar, 1995	Fe-59	Lw-1707, 1708	A	5.5±6.2;6.2	-6.7±6.2;6.2
Mar, 1995	Gr. Beta	Lw-1707, 1708	A	2.0±0.5;0.6	2.1±0.5;0.6
Mar, 1995	I-131	Lw-1707, 1708	A	0.2±0.3;0.3	-0.1±0.3;0.3
Mar, 1995	I-131(g)	Lw-1707, 1708	A	-0.7±6.7;6.7	-0.6±6.2;6.2
Mar, 1995	K-40	Lw-1707, 1708	A	79.3±42.8;43.5	75.3±39.2;39.9
Mar, 1995	La-140	Lw-1707, 1708	A	-3.6±5.1;5.1	1.3±4.6;4.6
Mar, 1995	Mn-54	Lw-1707, 1708	A	-1.9±3.1;3.1	0.8±2.5;2.5
Mar, 1995	Ru-103	Lw-1707, 1708	A	-0.1±3.3;3.3	-0.8±3.0;3.0
Mar, 1995	Zn-65	Lw-1707, 1708	A	-2.7±6.5;6.5	-1.7±5.8;5.8
Mar, 1995	Zr-Nb-95	Lw-1707, 1708	A	-0.3±3.1;3.1	-3.2±2.7;2.7
Mar, 1995	H-3	Sw-1762, 1763	A	104.4±89.4;90.5	92.2±88.8;89.7
Mar, 1995	Cs-137	So-1861, 1862	A	0.3±0.0;0.0	0.2±0.0;0.0
Mar, 1995	K-40	So-1861, 1862	A	11.7±0.6;1.3	11.3±0.5;1.2
Mar, 1995	Ra-226	So-1861, 1862	A	1.7±0.4;0.4	1.5±0.3;0.3



Table A-4. In-house "duplicate" program.

Date Collected Analysis		Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Mar, 1995	H-3	Sw-1919, 1920	A	-9.1±85.2;85.2	66.7±88.9;89.3
Mar, 1995	H-3	Sw-1919, 1920	A	-9.1±85.2;85.2	66.7±88.9;89.3
Mar, 1995	Gr. Alpha	Wwu-2031, 2032	A	2.0±2.3;2.3	3.0±2.4;2.5
Mar, 1995	Gr. Beta	Wwu-2031, 2032	A	1.3±1.9;1.9	2.1±2.0;2.0
Mar, 1995	Gr. Beta	Cw-1997, 1998	A	2.7±1.0;1.1	2.3±1.4;1.4
Mar, 1995	Gr. Beta	Cw-1997, 1998	A	-0.5±1.0;1.0	0.6±1.1;1.1
Mar, 1995	Co-60	Ap-2784, 2785	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Mar, 1995	Cs-137	Ap-2784, 2785	A	-0.0±0.0;0.0	0.0±0.0;0.0
Mar, 1995	I-131	Mi-2083, 2084	A	0.0±0.2;0.2	0.0±0.2;0.2
Mar, 1995	K-40	Mi-2083, 2084	A	1,273.9±69.7;186.7	1,328.9±59.8;190.4
Mar, 1995	Sr-90	Mi-2083, 2084	A	1.6±0.5;0.5	1.8±0.6;0.6
Mar, 1995	Gr. Beta	Sw-2104, 2105	A	1.7±0.5;0.6	1.7±0.6;0.6
Mar, 1995	H-3	Sw-2200, 2201	A	33.8±85.6;85.8	54.0±86.6;86.9
Mar, 1995	Co-60	Sw-2355, 2356	A	0.6±1.5;1.5	0.9±1.6;1.6
Mar, 1995	Cs-137	Sw-2355, 2356	A	2.2±1.5;1.6	0.1±1.9;1.9
Mar, 1995	Sr-89	Ap-2453, 2454	A	0.0±0.0;0.0	-0.0±0.0;0.0
Mar, 1995	Sr-90	Ap-2453, 2454	A	0.0±0.0;0.0	0.0±0.0;0.0
Mar, 1995	Co-60	Ap-2805, 2806	A	-0.0±0.0;0.0	0.0±0.0;0.0
Mar, 1995	Cs-137	Ap-2805, 2806	A	0.0±0.0;0.0	0.0±0.0;0.0
Mar, 1995	K-40	Sw-2221, 2222	A	149.7±74.4;75.9	119.4±46.7;48.2
Mar, 1995	H-3	Pw-2248, 2249	A	154.6±91.1;93.5	164.8±91.5;94.2
Mar, 1995	Co-60	Pw-2271, 2272	A	-0.5±2.0;2.0	-1.2±2.9;2.9
Mar, 1995	Cs-137	Pw-2271, 2272	A	1.0±2.1;2.1	0.9±3.5;3.5
Apr, 1995	Co-60	Mi-2149, 2150	A	-1.2±2.2;2.2	0.7±2.7;2.7
Apr, 1995	Cs-137	Mi-2149, 2150	A	0.2±2.0;2.0	2.3±2.2;2.2
Apr, 1995	I-131(G)	Mi-2149, 2150	A	0.1±2.2;2.2	0.3±2.5;2.5
Apr, 1995	Gr. Beta	Ww-2313, 2314	A	0.6±0.5;0.5	1.0±0.5;0.5
Apr, 1995	Gr. Beta	Cw-2401, 2402	A	1.7±1.3;1.3	3.5±1.5;1.5
Apr, 1995	Gr. Beta	Cw-2401, 2402	A	0.0±1.1;1.1	0.5±1.1;1.1
Apr, 1995	K-40	Sl-2567, 2568	A	1.4±0.4;0.5	1.7±0.4;0.4
Apr, 1995	H-3	Ww-2432, 2433	A	-21.6±82.7;82.8	2.7±83.9;83.9
Apr, 1995	Gr. Beta	Ww-2659, 2660	A	0.5±0.6;0.6	0.4±0.4;0.4
Apr, 1995	H-3	Ww-2659, 2660	A	38.4±87.5;87.6	133.4±91.7;93.5
Apr, 1995	I-131	Mi-2713, 2714	A	0.4±0.5;0.5	0.2±0.2;0.2
Apr, 1995	K-40	Mi-2713, 2714	A	1,420.9±137.0;236.9	1,420.0±137.0;236.8
Apr, 1995	Gr. Beta	Cw-2739, 2740	A	13.8±2.1;3.0	14.3±2.1;3.0

Table A-4. In-house "duplicate" program.

Date Collected Analysis		Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Apr, 1995	Gr. Beta	Cw-2739, 2740	A	5.1±1.5;1.6	2.3±1.3;1.4
Apr, 1995	H-3	Sw-2686, 2687	A	52.7±87.0;87.3	2.0±84.6;84.6
Apr, 1995	Gr. Alpha	Ww-3447, 3448	A	-0.3±1.7;1.7	-1.5±1.6;1.7
Apr, 1995	Gr. Beta	Ww-3447, 3448	A	1.2±1.7;1.7	3.2±1.8;1.9
Apr, 1995	Gr. Beta	Cw-2835, 2836	A	2.0±1.4;1.4	2.7±1.5;1.5
Apr, 1995	Gr. Beta	Cw-2835, 2836	A	0.2±1.2;1.2	0.8±1.2;1.2
Apr, 1995	Gr. Beta	Cw-2918, 2919	A	5.3±1.6;1.8	4.3±1.6;1.7
Apr, 1995	Gr. Beta	Cw-2918, 2919	A	2.1±1.3;1.4	0.8±1.2;1.2
Apr, 1995	K-40	F-3552, 3553	A	3.1±0.4;0.5	2.9±0.2;0.4
Apr, 1995	Sr-89	F-3552, 3553	A	-0.0±0.0;0.0	0.0±0.0;0.0
Apr, 1995	Sr-90	F-3552, 3553	A	0.0±0.0;0.0	0.0±0.0;0.0
Apr, 1995	Gr. Beta	Swt-3343, 3344	A	2.3±0.5;0.6	3.0±0.5;0.7
Apr, 1995	K-40	G-3133, 3134	A	6.5±0.2;0.7	6.1±0.3;0.7
Apr, 1995	H-3	Sw-3403, 3404	A	159.6±90.6;93.2	72.7±86.6;87.2
Apr, 1995	H-3	Ww-3424, 3425	A	442.5±116.7;131.3	430.4±116.3;130.2
Apr, 1995	Gr. Beta	Lw-3682, 3683	A	2.1±0.6;0.7	1.5±0.6;0.6
Apr, 1995	Gr. Beta	Lw-3682, 3683	A	2.1±0.7;0.7	1.5±0.5;0.6
Apr, 1995	H-3	Lw-3682, 3683	A	139.9±91.1;93.1	75.0±88.2;88.8
Apr, 1995	H-3	Lw-3682, 3683	A	75.0±88.2;88.8	139.9±91.1;93.1
May, 1995	Cs-137	So-3531, 3532	A	0.2±0.0;0.0	0.1±0.0;0.0
May, 1995	Gr. Alpha	So-3531, 3532	A	6.9±3.6;3.6	9.2±3.9;4.0
May, 1995	Gr. Beta	So-3531, 3532	A	17.1±3.1;3.5	18.8±3.1;3.7
May, 1995	K-40	So-3531, 3532	A	25.0±0.8;2.6	23.8±0.7;2.5
May, 1995	Sr-89	So-3531, 3532	A	-0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Sr-90	So-3531, 3532	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Co-60	-3577, 3578	A	-0.3±2.2;2.2	0.5±2.6;2.6
May, 1995	Cs-137	-3577, 3578	A	1.2±2.2;2.2	-1.6±2.9;2.9
May, 1995	H-3	Ww-3577, 3578	A	33.6±91.0;91.1	58.8±92.0;92.4
May, 1995	I-131	Mi-3598, 3599	A	0.2±0.4;0.4	0.2±0.3;0.3
May, 1995	K-40	Mi-3598, 3599	A	1,349.0±112.0;214.9	1,297.4±151.0;232.2
May, 1995	Co-60	Mi-3809, 3810	A	-0.4±3.0;3.0	0.2±3.0;3.0
May, 1995	Cs-137	Mi-3809, 3810	A	0.9±2.5;2.5	0.1±2.4;2.4
May, 1995	I-131	Mi-3809, 3810	A	0.1±0.2;0.2	0.2±0.2;0.2
May, 1995	Gr. Beta	Cw-3838, 3839	A	2.0±1.4;1.4	3.4±1.5;1.6
May, 1995	Gr. Beta	Cw-3838, 3839	A	-0.7±1.2;1.2	-1.1±1.2;1.2
May, 1995	Co-60	F-4309, 4310	A	-0.0±0.0;0.0	-0.0±0.0;0.0

Table A-4. In-house "duplicate" program.

Date Collected Analysis		Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
May, 1995	Cs-137	F-4309, 4310	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Co-60	F-4288, 4289	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Cs-137	F-4288, 4289	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Co-60	F-4330, 4331	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Cs-137	F-4330, 4331	A	0.0±0.0;0.0	-0.0±0.0;0.0
May, 1995	Co-60	Mi-4377, 4378	A	0.9±1.7;1.7	2.2±2.7;2.7
May, 1995	Cs-134	Mi-4377, 4378	A	0.8±1.5;1.5	-0.2±2.3;2.3
May, 1995	Cs-137	Mi-4377, 4378	A	0.9±1.4;1.4	0.6±2.1;2.1
May, 1995	I-131	Mi-4377, 4378	A	-0.1±0.1;0.1	-0.0±0.1;0.1
May, 1995	I-131(g)	Mi-4377, 4378	A	0.2±1.3;1.3	-1.1±2.6;2.6
May, 1995	K-40	Mi-4377, 4378	A	1,385.1±63.2;198.7	1,344.3±92.5;204.9
May, 1995	Sr-89	Mi-4377, 4378	A	-0.0±0.7;0.7	0.0±1.1;1.1
May, 1995	Sr-90	Mi-4377, 4378	A	1.3±0.4;0.5	1.3±0.6;0.7
May, 1995	I-131	Mi-4544, 4545	A	0.1±0.3;0.3	0.1±0.2;0.2
May, 1995	K-40	Mi-4544, 4545	A	1,410.0±72.3;204.9	1,359.0±65.7;196.2
May, 1995	Sr-90	Mi-4544, 4545	A	2.1±0.5;0.6	1.3±0.4;0.4
May, 1995	Be-7	G-4604, 4605	A	1.9±0.4;0.4	1.7±0.4;0.4
May, 1995	Co-60	G-4604, 4605	A	-0.0±0.0;0.0	-0.0±0.0;0.0
May, 1995	Cs-134	G-4604, 4605	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Cs-137	G-4604, 4605	A	0.1±0.0;0.0	0.1±0.0;0.0
May, 1995	Gr. Beta	G-4604, 4605	A	4.0±0.1;0.4	4.0±0.2;0.4
May, 1995	I-131(g)	G-4604, 4605	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	K-40	G-4604, 4605	A	5.1±0.7;0.8	5.1±0.7;0.9
May, 1995	Gr. Beta	Cw-4575, 4576	A	2.0±1.2;1.2	2.8±1.3;1.3
May, 1995	Gr. Beta	Cw-4575, 4576	A	-0.2±1.0;1.0	-0.6±1.0;1.0
May, 1995	I-131	Mi-4695, 4696	A	0.1±0.2;0.2	0.1±0.2;0.2
May, 1995	K-40	Mi-4695, 4696	A	1,568.8±114.0;241.9	1,573.1±50.1;219.7
May, 1995	Sr-89	Mi-4716, 4717	A	-0.3±0.8;0.8	-0.0±0.9;0.9
May, 1995	Sr-90	Mi-4716, 4717	A	1.2±0.4;0.5	1.6±0.4;0.5
May, 1995	Be-7	G-4814, 4815	A	0.6±0.3;0.3	0.6±0.2;0.2
May, 1995	K-40	G-4814, 4815	A	5.8±0.6;0.8	5.1±0.5;0.7
May, 1995	H-3	Ww-4784, 4785	A	18,665.3±390.2;2,568.3	18,274.9±386.3;2,515.2
May, 1995	H-3	Sw-4759, 4760	A	3,679.8±213.9;544.3	3,817.8±217.0;562.8
May, 1995	Cs-137	So-5178, 5179	A	0.8±0.1;0.1	0.8±0.1;0.1
May, 1995	K-40	So-5178, 5179	A	19.9±1.1;2.3	22.1±1.2;2.5
May, 1995	Gr. Beta	Swu-5663, 5664	A	2.5±0.6;0.7	2.5±0.6;0.7

Table A-4. In-house "duplicate" program.

Date Collected Analysis		Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
May, 1995	H-3	Swu-5663, 5664	A	867.2±104.9;157.8	865.5±104.9;157.6
May, 1995	Gr. Beta	Bs - 6983, 6984	A	7.4±1.2;1.4	8.0±1.4;1.6
May, 1995	Gr. Beta	Bs - 6983, 6984	A	7.4±1.2;1.4	8.0±1.4;1.6
May, 1995	K-40	Bs - 6983, 6984	A	8.3±0.3;0.9	8.5±0.1;0.9
May, 1995	K-40	Bs - 6983, 6984	A	8.3±0.3;0.9	8.5±0.1;0.9
May, 1995	Cs-137	Bs-6983, 6984	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Gr. Beta	Bs-6983, 6984	A	7.4±1.2;1.4	8.0±1.4;1.6
May, 1995	K-40	Bs-6983, 6984	A	8.3±0.3;0.9	8.5±0.1;0.9
May, 1995	Cs-137	Bs - 5494, 5495	A	0.6±0.0;0.1	0.6±0.0;0.1
May, 1995	Cs-137	Bs - 5494, 5495	A	0.6±0.0;0.1	0.6±0.0;0.1
May, 1995	K-40	Bs - 5494, 5495	A	21.1±0.7;2.2	21.3±0.7;2.2
May, 1995	K-40	Bs - 5494, 5495	A	21.1±0.7;2.2	21.3±0.7;2.2
May, 1995	Cs-137	Bs-5494, 5495	A	0.6±0.0;0.1	0.6±0.0;0.1
May, 1995	K-40	Bs-5494, 5495	A	21.1±0.7;2.2	21.3±0.7;2.2
May, 1995	Co-60	F-5025, 5026	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Cs-137	F-5025, 5026	A	-0.0±0.0;0.0	-0.0±0.0;0.0
May, 1995	K-40	F-5385, 5386	A	2.5±0.3;0.4	2.6±0.4;0.5
May, 1995	Co-60	F-5046, 5047	A	0.0±0.0;0.0	-0.0±0.0;0.0
May, 1995	Cs-137	F-5046, 5047	A	0.0±0.0;0.0	-0.0±0.0;0.0
May, 1995	H-3	Ww-5244, 5245	A	608.4±96.3;127.0	463.6±91.1;110.8
May, 1995	Co-60	Sw-6013, 6014	A	0.8±2.2;2.2	1.5±3.0;3.0
May, 1995	Cs-137	Sw-6013, 6014	A	-0.7±2.3;2.3	0.5±2.3;2.3
May, 1995	I-131	Mi-5620, 5621	A	0.2±0.2;0.2	0.0±0.2;0.2
May, 1995	K-40	Mi-5620, 5621	A	1,526.2±119.0;239.3	1,449.3±162.0;255.1
May, 1995	Gr. Alpha	Ww - 5642, 5643	A	2.3±2.3;2.3	2.3±2.3;2.3
May, 1995	Gr. Beta	Ww - 5642, 5643	A	2.3±3.3;3.3	2.3±3.3;3.3
May, 1995	K-40	Ww - 5642, 5643	A	94.4±19.8;21.9	59.0±29.5;30.1
May, 1995	Gr. Beta	Dw-5738, 5739	A	2.5±1.2;1.2	3.6±1.2;1.3
May, 1995	I-131	Dw-5738, 5739	A	-0.0±0.2;0.2	-0.0±0.1;0.1
May, 1995	Gr. Beta	Lw-6327, 6328	A	6.5±1.0;1.4	6.6±1.0;1.5
May, 1995	Sr-89	W-6398, 6399	A	15.1±3.8;4.1	18.1±2.7;3.3
May, 1995	Sr-90	W-6398, 6399	A	25.1±1.9;3.1	24.4±1.3;2.8
Jun, 1995	Gr. Beta	Ww-6184, 6185	A	6.0±1.1;1.4	7.5±1.4;1.8
Jun, 1995	H-3	Ww-6184, 6185	A	86.1±78.3;79.2	107.0±79.3;80.6
Jun, 1995	Co-60	Mi-5684, 5685	A	0.1±3.0;3.0	0.4±4.6;4.6
Jun, 1995	Cs-137	Mi-5684, 5685	A	1.8±2.7;2.7	-0.9±3.2;3.2

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Jun, 1995	I-131	Mi-5684, 5685	A	0.1±0.1;0.1	-0.0±0.1;0.1
Jun, 1995	Gr. Beta	Cw-5713, 5714	A	3.1±1.4;1.5	3.3±1.4;1.5
Jun, 1995	Gr. Beta	Cw-5713, 5714	A	0.0±1.5;1.5	0.4±1.5;1.5
Jun, 1995	Co-60	Sl-5832, 5833	A	0.0±0.0;0.0	0.1±0.0;0.0
Jun, 1995	Cs-137	Sl-5832, 5833	A	0.1±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Gr. Beta	Sl-5832, 5833	A	4.7±0.5;0.7	4.7±0.5;0.7
Jun, 1995	K-40	Sl-5832, 5833	A	2.9±0.3;0.4	2.4±0.3;0.4
Jun, 1995	Sr-89	Sl-5832, 5833	A	0.0±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Sr-90	Sl-5832, 5833	A	0.0±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Co-60	Ww-5992, 5993	A	0.4±1.2;1.2	0.9±2.7;2.7
Jun, 1995	Cs-137	Ww-5992, 5993	A	-1.4±1.4;1.4	-1.4±3.0;3.0
Jun, 1995	H-3	Ww-5992, 5993	A	67.0±76.2;76.7	94.0±77.3;78.4
Jun, 1995	Co-60	Sl-6205, 6206	A	0.0±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Cs-134	Sl-6205, 6206	A	0.0±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Cs-137	Sl-6205, 6206	A	0.0±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Gr. Beta	Sl-6205, 6206	A	3.3±0.1;0.3	3.3±0.1;0.3
Jun, 1995	I-131(g)	Sl-6205, 6206	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Jun, 1995	K-40	Sl-6205, 6206	A	3.3±0.3;0.5	3.3±0.4;0.5
Jun, 1995	H-3	Sw-6256, 6257	A	423.9±92.0;108.6	585.0±97.9;126.1
Jun, 1995	I-131	Mi-6277, 6278	A	0.1±0.2;0.2	0.1±0.2;0.2
Jun, 1995	K-40	Mi-6277, 6278	A	1,285.5±152.0;231.7	1,355.2±114.0;216.7
Jun, 1995	H-3	Sw-6232, 6233	A	68.4±79.5;80.0	136.7±82.4;84.5
Jun, 1995	Gr. Alpha	Ve-6348, 6349	A	0.3±0.1;0.1	0.2±0.1;0.1
Jun, 1995	Gr. Beta	Ve-6348, 6349	A	3.3±0.1;0.4	3.4±0.1;0.4
Jun, 1995	K-40	Ve-6348, 6349	A	3.1±0.3;0.5	3.0±0.3;0.4
Jun, 1995	I-131	Mi-6419, 6420	A	0.1±0.2;0.2	0.1±0.2;0.2
Jun, 1995	K-40	Mi-6419, 6420	A	1,457.2±175.0;264.4	1,339.3±150.0;236.0
Jun, 1995	I-131	Mi-6521, 6522	A	0.1±0.2;0.2	0.0±0.2;0.2
Jun, 1995	K-40	Mi-6521, 6522	A	1,475.4±123.0;235.4	1,274.6±160.0;235.9
Jun, 1995	K-40	Sl-6500, 6501	A	1.8±0.5;0.5	2.2±0.5;0.6
Jun, 1995	Co-60	Mi-6446, 6447	A	0.2±4.9;4.9	0.4±2.8;2.8
Jun, 1995	Cs-137	Mi-6446, 6447	A	1.3±3.4;3.4	0.1±2.2;2.2
Jun, 1995	I-131	Mi-6446, 6447	A	-0.0±0.2;0.2	0.0±0.2;0.2
Jun, 1995	Gr. Beta	Cw-6474, 6475	A	2.8±1.4;1.5	3.2±1.4;1.5
Jun, 1995	Gr. Beta	Cw-6474, 6475	A	0.0±1.2;1.2	0.1±1.2;1.2
Jun, 1995	I-131	Mi-6564, 6565	A	0.2±0.3;0.3	0.1±0.2;0.2



Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Jun, 1995	Cs-137	Bs-6960, 6961	A	0.1±0.0;0.0	0.0±0.0;0.0
Jun, 1995	K-40	Bs-6960, 6961	A	17.7±0.9;2.0	17.0±1.1;2.0
Jun, 1995	H-3	Ww-6861, 6862	A	1,422.4±128.0;232.0	1,505.1±130.3;242.6
Jun, 1995	I-131	Mi-6840, 6841	A	0.2±0.2;0.2	0.1±0.2;0.2
Jun, 1995	Co-60	Lw-6889, 6890	A	-2.4±3.4;3.4	1.4±1.7;1.8
Jun, 1995	Cs-137	Lw-6889, 6890	A	-0.5±3.0;3.0	0.1±2.2;2.2
Jun, 1995	Gr. Beta	Lw-6889, 6890	A	3.0±0.8;1.0	3.0±0.8;1.0
Jun, 1995	H-3	Sw-7053, 7054	A	73.2±75.7;76.3	126.8±78.2;80.1
Jun, 1995	H-3	Sw-7011, 7012	A	203.6±81.6;86.2	226.8±82.6;88.2
Jun, 1995	I-131	Mi-7032, 7033	A	0.3±0.3;0.3	-0.1±0.3;0.3
Jun, 1995	K-40	Mi-7032, 7033	A	1,577.6±127.0;249.3	1,522.8±164.0;264.2
Jun, 1995	Gr. Beta	Swu-7101, 7102	A	2.0±0.5;0.6	2.1±0.5;0.6
Jun, 1995	H-3	Swu-7101, 7102	A	118.6±85.8;87.3	92.6±84.7;85.6
Jun, 1995	Sr-89	Swu - 7828, 7829	A	0.6±0.8;0.8	0.1±0.7;0.7
Jun, 1995	Sr-90	Swu - 7828, 7829	A	0.2±0.3;0.3	0.2±0.3;0.3
Jun, 1995	Sr-90	Swu - 7828, 7829	A	0.2±0.3;0.3	0.2±0.3;0.3
Jun, 1995	Sr-89	Swu-7828, 7829	A	0.6±0.8;0.8	0.1±0.7;0.7
Jun, 1995	Sr-89	Swu-7828, 7829	A	0.6±0.8;0.8	0.1±0.7;0.7
Jun, 1995	Sr-89	Swu-7828, 7829	A	0.6±0.8;0.8	0.1±0.7;0.7
Jun, 1995	Sr-89	Swu-7828, 7829	A	0.6±0.8;0.8	0.1±0.7;0.7
Jun, 1995	Sr-90	Swu-7828, 7829	A	0.2±0.3;0.3	0.2±0.3;0.3
Jun, 1995	Sr-90	Swu-7828, 7829	A	0.2±0.3;0.3	0.2±0.3;0.3
Jun, 1995	Sr-90	Swu-7828, 7829	A	0.2±0.3;0.3	0.2±0.3;0.3
Jun, 1995	Sr-90	Swu-7828, 7829	A	0.2±0.3;0.3	0.2±0.3;0.3
Jun, 1995	Co-60	Ap-8111, 8112	A	-0.0±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Cs-137	Ap-8111, 8112	A	-0.0±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Gr. Beta	Sw-7080, 7081	A	2.3±0.6;0.7	2.7±0.6;0.7
Jun, 1995	K-40	Sw-7080, 7081	A	61.3±28.3;29.0	95.4±26.0;27.7
Jun, 1995	H-3	Wwt-7122, 7123	A	3.8±81.4;81.4	-13.4±80.6;80.6
Jun, 1995	Gr. Beta	Lw-7239, 7240	A	2.5±0.1;0.4	2.4±0.6;0.7
Jun, 1995	H-3	Ww-7143, 7144	A	539.1±103.3;126.7	436.4±99.5;115.9
Jun, 1995	H-3	Pw-7174, 7175	A	144.1±84.3;86.5	121.4±83.3;84.9
Jun, 1995	H-3	Sw-7216, 7217	A	20.4±81.4;81.5	63.0±83.3;83.8
Jun, 1995	Gr. Beta	Ww-7281, 7282	A	1.8±0.3;0.4	2.1±0.6;0.7
Jun, 1995	H-3	Ww-7281, 7282	A	-24.3±75.2;75.2	10.3±76.8;76.8
Jul, 1995	Co-60	Sw-7387, 7388	A	1.0±1.9;1.9	0.2±1.7;1.7



Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Jul, 1995	Cs-137	Sw-7387, 7388	A	0.6±2.3;2.3	-0.9±2.0;2.0
Jul, 1995	Co-60	Ap-8133, 8134	A	-0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	Cs-137	Ap-8133, 8134	A	-0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	Sr-89	Ap-7600, 7601	A	0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	Sr-90	Ap-7600, 7601	A	-0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	Co-60	Mi-7260, 7261	A	0.3±2.9;2.9	0.6±5.2;5.2
Jul, 1995	Cs-137	Mi-7260, 7261	A	1.7±2.6;2.6	-1.5±3.4;3.4
Jul, 1995	I-131	Mi-7260, 7261	A	0.2±0.2;0.2	0.1±0.2;0.2
Jul, 1995	H-3	Ww-7454, 7455	A	7,142.8±243.6;1,001.5	6,985.4±241.2;980.2
Jul, 1995	K-40	Lw - 7487, 7488	A	48.0±14.4;15.2	95.8±39.9;41.0
Jul, 1995	K-40	Lw - 7487, 7488	A	48.0±14.4;15.2	95.8±39.9;41.0
Jul, 1995	Co-60	Lw-7487, 7488	A	0.4±1.1;1.1	0.4±3.0;3.0
Jul, 1995	Cs-134	Lw-7487, 7488	A	0.1±1.1;1.1	-2.4±3.0;3.0
Jul, 1995	Cs-137	Lw-7487, 7488	A	0.5±1.1;1.1	-2.2±2.8;2.9
Jul, 1995	Gr. Beta	Lw-7487, 7488	A	2.1±0.5;0.6	1.9±0.5;0.6
Jul, 1995	I-131	Lw-7487, 7488	A	0.2±0.3;0.3	-0.0±0.3;0.3
Jul, 1995	I-131(g)	Lw-7487, 7488	A	0.3±2.4;2.4	0.9±10.5;10.5
Jul, 1995	K-40	Lw-7487, 7488	A	48.0±14.4;15.2	95.8±39.9;41.0
Jul, 1995	K-40	Lw-7487, 7488	A	48.0±14.4;15.2	95.8±39.9;41.0
Jul, 1995	K-40	Lw-7487, 7488	A	48.0±14.4;15.2	95.8±39.9;41.0
Jul, 1995	K-40	Lw-7487, 7488	A	48.0±14.4;15.2	95.8±39.9;41.0
Jul, 1995	Gr. Beta	Sw-7323, 7324	A	2.3±0.8;0.8	2.6±0.8;0.9
Jul, 1995	H-3	Sw-7323, 7324	A	77.9±84.0;84.7	48.4±82.6;82.9
Jul, 1995	Co-60	F-7366, 7367	A	0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	Cs-137	F-7366, 7367	A	0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	I-131	Mi-7510, 7511	A	0.3±0.4;0.4	0.1±0.4;0.4
Jul, 1995	Co-60	F-7344, 7345	A	0.0±0.0;0.0	-0.0±0.0;0.0
Jul, 1995	Cs-137	F-7344, 7345	A	0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	I-131	Mi-7429, 7430	A	-0.2±0.3;0.3	0.2±0.2;0.2
Jul, 1995	Gr. Beta	F-8154, 8155	A	2.3±0.1;0.2	2.3±0.1;0.2
Jul, 1995	K-40	F-8154, 8155	A	2.2±0.3;0.3	2.1±0.4;0.5
Jul, 1995	Co-60	Mi-7575, 7576	A	-1.0±2.9;2.9	1.6±3.2;3.2
Jul, 1995	Cs-134	Mi-7575, 7576	A	1.7±2.4;2.4	-0.6±2.4;2.4
Jul, 1995	Cs-137	Mi-7575, 7576	A	-0.8±2.5;2.5	1.3±2.4;2.4
Jul, 1995	I-131	Mi-7575, 7576	A	0.2±0.2;0.2	0.1±0.2;0.2
Jul, 1995	I-131(g)	Mi-7575, 7576	A	0.9±2.2;2.2	0.9±2.4;2.4

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Jul, 1995	K-40	Mi-7575, 7576	A	1,481.9±111.0;230.1	1,398.8±106.0;217.8
Jul, 1995	Sr-89	Mi-7575, 7576	A	0.6±1.0;1.0	-0.5±0.9;0.9
Jul, 1995	Sr-90	Mi-7575, 7576	A	1.2±0.4;0.4	1.8±0.4;0.4
Jul, 1995	I-131	Wwt-7621, 7622	A	0.1±0.2;0.2	0.1±0.2;0.2
Jul, 1995	Co-60	Mi-7739, 7740	A	0.9±4.9;4.9	-0.6±4.6;4.6
Jul, 1995	Cs-137	Mi-7739, 7740	A	0.9±3.7;3.7	-0.4±3.1;3.1
Jul, 1995	I-131	Mi-7739, 7740	A	0.2±0.3;0.3	-0.0±0.2;0.2
Jul, 1995	Co-60	G-7805, 7806	A	-0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	Cs-134	G-7805, 7806	A	-0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	Cs-137	G-7805, 7806	A	0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	Gr. Beta	G-7805, 7806	A	5.1±0.2;0.5	5.1±0.2;0.6
Jul, 1995	I-131(g)	G-7805, 7806	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Jul, 1995	K-40	G-7805, 7806	A	6.0±0.6;0.8	5.8±0.5;0.8
Jul, 1995	Gr. Beta	Cw-7648, 7649	A	6.7±1.7;2.0	6.7±1.7;2.0
Jul, 1995	Gr. Beta	Cw-7648, 7649	A	0.7±1.3;1.3	0.2±1.2;1.2
Jul, 1995	H-3	Cw-7648, 7649	A	-64.4±97.5;97.9	-70.2±97.2;97.7
Jul, 1995	Gr. Beta	Ww-7673, 7674	A	14.1±2.2;3.1	14.2±2.2;3.1
Jul, 1995	H-3	Ww-7673, 7674	A	15.3±81.8;81.8	36.4±82.7;82.9
Jul, 1995	Sr-89	Mi-7896, 7897	A	0.4±1.0;1.0	0.2±0.9;0.9
Jul, 1995	Sr-90	Mi-7896, 7897	A	1.7±0.4;0.5	1.3±0.4;0.4
Jul, 1995	H-3	Ww-7967, 7968	A	109.5±84.6;85.9	70.8±82.8;83.4
Jul, 1995	Co-60	Mi-7922, 7923	A	0.6±3.1;3.1	-1.1±4.5;4.5
Jul, 1995	Cs-137	Mi-7922, 7923	A	1.2±2.9;2.9	-0.5±3.4;3.4
Jul, 1995	I-131	Mi-7922, 7923	A	0.1±0.2;0.2	0.0±0.2;0.2
Jul, 1995	Co-60	Lw-7944, 7945	A	0.1±2.2;2.2	1.3±1.9;1.9
Jul, 1995	Cs-137	Lw-7944, 7945	A	0.6±2.2;2.2	-1.4±1.8;1.8
Jul, 1995	Gr. Beta	Lw-7944, 7945	A	4.1±0.9;1.1	4.0±0.9;1.1
Jul, 1995	Co-60	Sw-8704, 8705	A	0.2±2.5;2.5	1.0±1.8;1.8
Jul, 1995	Cs-137	Sw-8704, 8705	A	0.3±3.5;3.5	-0.7±1.9;1.9
Jul, 1995	H-3	Ww-8196, 8197	A	51.4±87.9;88.2	176.0±93.4;96.4
Jul, 1995	Gr. Beta	Swu-8318, 8319	A	2.0±0.5;0.6	1.9±0.5;0.6
Jul, 1995	H-3	Swu-8318, 8319	A	102.7±103.7;104.6	35.5±101.2;101.3
Jul, 1995	K-40	Swu-8318, 8319	A	93.3±39.7;40.8	99.7±49.1;50.1
Jul, 1995	Gr. Alpha	Sp-8540, 8541	A	5.2±1.3;1.4	3.9±1.1;1.1
Jul, 1995	Sr-89	Sp-8540, 8541	A	1,443.1±42.1;150.3	1,419.5±35.3;146.3
Jul, 1995	Sr-90	Sp-8540, 8541	A	15.7±3.8;4.1	19.4±4.1;4.6

Table A-4. In-house "duplicate" program.

Date Collected Analysis		Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Jul, 1995	Gr. Beta	Ve-8090, 8091	A	2.4±0.1;0.3	2.3±0.1;0.2
Jul, 1995	K-40	Ve-8090, 8091	A	2.8±0.1;0.3	2.8±0.1;0.3
Jul, 1995	Gr. Alpha	Sw-8175, 8176	A	0.5±0.6;0.6	0.7±0.8;0.8
Jul, 1995	Gr. Beta	Sw-8175, 8176	A	0.8±1.1;1.1	0.8±1.1;1.1
Jul, 1995	K-40	Sw-8175, 8176	A	89.8±23.8;25.4	67.4±39.3;39.9
Jul, 1995	H-3	Sw-8251, 8252	A	86.8±78.9;79.8	44.0±76.9;77.2
Jul, 1995	Co-60	Sw-8606, 8607	A	0.1±1.7;1.7	-0.2±2.6;2.6
Jul, 1995	Cs-137	Sw-8606, 8607	A	-1.0±2.0;2.0	-0.7±2.2;2.2
Aug, 1995	K-40	G - 8272, 8273	A	6.7±0.6;0.9	6.7±1.0;1.2
Aug, 1995	Sr-89	G - 8272, 8273	A	0.0±0.0;0.0	-0.0±0.0;0.0
Aug, 1995	Sr-90	G - 8272, 8273	A	0.0±0.0;0.0	0.0±0.0;0.0
Aug, 1995	Gr. Beta	G-8272, 8273	A	6.2±0.3;0.7	6.0±0.3;0.6
Aug, 1995	I-131	Mi-8293, 8294	A	-0.1±0.2;0.2	0.0±0.2;0.2
Aug, 1995	I-131	Mi-8389, 8390	A	-0.0±0.1;0.1	0.1±0.1;0.1
Aug, 1995	K-40	Mi-8389, 8390	A	1,543.8±120.0;241.8	1,369.6±162.0;246.9
Aug, 1995	Co-60	Mi-8413, 8414	A	0.3±3.1;3.1	-2.4±5.2;5.2
Aug, 1995	Cs-137	Mi-8413, 8414	A	-0.7±2.9;2.9	-1.4±3.3;3.3
Aug, 1995	I-131	Mi-8413, 8414	A	0.1±0.2;0.2	0.1±0.2;0.2
Aug, 1995	Co-60	Lw-8440, 8441	A	0.1±2.4;2.4	1.0±1.8;1.8
Aug, 1995	Cs-137	Lw-8440, 8441	A	0.8±2.0;2.0	-0.4±2.1;2.1
Aug, 1995	Gr. Beta	Lw-8440, 8441	A	3.3±1.1;1.2	4.7±1.2;1.4
Aug, 1995	Co-60	Ww-8518, 8519	A	1.5±3.1;3.1	-1.8±3.0;3.0
Aug, 1995	Cs-137	Ww-8518, 8519	A	1.7±2.9;2.9	0.4±2.8;2.8
Aug, 1995	H-3	Ww-8518, 8519	A	10.7±74.0;74.1	-19.6±72.6;72.6
Aug, 1995	Co-60	Ve-8564, 8565	A	0.0±0.0;0.0	0.0±0.0;0.0
Aug, 1995	Cs-137	Ve-8564, 8565	A	0.0±0.0;0.0	-0.0±0.0;0.0
Aug, 1995	Co-60	Mi-8585, 8586	A	-0.5±4.1;4.1	1.9±2.6;2.6
Aug, 1995	Cs-134	Mi-8585, 8586	A	0.1±3.5;3.5	0.9±2.3;2.3
Aug, 1995	Cs-137	Mi-8585, 8586	A	1.8±3.6;3.6	0.2±2.1;2.1
Aug, 1995	I-131	Mi-8585, 8586	A	-0.2±0.2;0.2	0.1±0.2;0.2
Aug, 1995	I-131(g)	Mi-8585, 8586	A	0.1±9.0;9.0	2.4±6.8;6.8
Aug, 1995	K-40	Mi-8585, 8586	A	1,454.6±150.0;248.3	1,478.2±104.0;226.3
Aug, 1995	Sr-89	Mi-8585, 8586	A	0.1±1.1;1.1	-0.1±0.9;0.9
Aug, 1995	Sr-90	Mi-8585, 8586	A	1.9±0.4;0.5	1.6±0.4;0.4
Aug, 1995	Co-60	Mi-8674, 8675	A	-0.8±3.2;3.2	0.5±3.3;3.3
Aug, 1995	Cs-137	Mi-8674, 8675	A	0.8±2.4;2.4	0.4±2.4;2.4

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Aug, 1995	I-131	Mi-8674, 8675	A	0.1±0.3;0.3	-0.1±0.2;0.2
Aug, 1995	H-3	Sw-8648, 8649	A	35.6±75.1;75.3	21.3±74.5;74.5
Aug, 1995	Co-60	F-8754, 8755	A	0.0±0.0;0.0	0.0±0.0;0.0
Aug, 1995	Cs-134	F-8754, 8755	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Aug, 1995	Cs-137	F-8754, 8755	A	0.1±0.0;0.0	0.1±0.0;0.0
Aug, 1995	Gr. Beta	F-8754, 8755	A	13.1±0.3;1.3	12.6±0.3;1.3
Aug, 1995	I-131(g)	F-8754, 8755	A	0.0±0.0;0.0	0.0±0.0;0.0
Aug, 1995	K-40	F-8754, 8755	A	2.8±0.4;0.5	3.3±0.4;0.5
Aug, 1995	Gr. Alpha	Ve-8946, 8947	A	0.2±0.1;0.1	0.2±0.1;0.1
Aug, 1995	Gr. Beta	Ve-8946, 8947	A	4.3±0.2;0.5	4.3±0.2;0.5
Aug, 1995	K-40	Ve-8946, 8947	A	4.0±0.3;0.5	4.0±0.3;0.5
Aug, 1995	Sr-89	Ve - 8802, 8803	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Aug, 1995	Sr-90	Ve - 8802, 8803	A	0.0±0.0;0.0	0.0±0.0;0.0
Aug, 1995	K-40	Ve-8802, 8803	A	2.3±0.2;0.3	2.3±0.3;0.4
Aug, 1995	I-131	Mi-8845, 8846	A	0.0±0.2;0.2	0.1±0.2;0.2
Aug, 1995	Gr. Beta	Cw-8873, 8874	A	1.9±1.4;1.4	4.3±1.6;1.7
Aug, 1995	Gr. Beta	Cw-8873, 8874	A	-0.6±1.1;1.1	-0.0±1.2;1.2
Aug, 1995	I-131	Mi-8902, 8903	A	-0.0±0.2;0.2	0.1±0.3;0.3
Aug, 1995	K-40	Ve-9035, 9036	A	2.2±0.3;0.4	2.4±0.3;0.4
Aug, 1995	H-3	Sw-9056, 9057	A	140.7±79.6;81.9	55.2±75.7;76.0
Aug, 1995	I-131	Mi-9113, 9114	A	0.2±0.3;0.3	0.3±0.3;0.3
Aug, 1995	Co-60	Lw-9079, 9080	A	0.8±2.8;2.8	0.2±3.0;3.0
Aug, 1995	Cs-137	Lw-9079, 9080	A	0.8±2.8;2.8	-0.5±2.7;2.7
Aug, 1995	Gr. Beta	Lw-9079, 9080	A	2.8±0.9;1.0	2.7±0.9;1.0
Aug, 1995	Co-60	Sw-9183, 9184	A	-0.3±3.0;3.0	2.2±4.0;4.1
Aug, 1995	Cs-137	Sw-9183, 9184	A	0.8±3.4;3.4	0.3±4.4;4.4
Aug, 1995	Gr. Beta	Swu-9162, 9163	A	2.5±0.5;0.6	2.5±0.5;0.7
Aug, 1995	H-3	Swu-9162, 9163	A	152.0±88.0;90.4	157.4±83.7;86.4
Aug, 1995	H-3	Ww-9276, 9277	A	1,636.0±131.0;258.2	1,680.8±132.2;264.1
Aug, 1995	Gr. Beta	Ve-9210, 9211	A	4.1±0.2;0.5	4.1±0.2;0.4
Aug, 1995	K-40	Ve-9210, 9211	A	4.6±0.1;0.5	4.6±0.1;0.5
Aug, 1995	Gr. Beta	Dw-9371, 9372	A	5.0±1.2;1.4	4.5±1.2;1.4
Aug, 1995	I-131	Dw-9371, 9372	A	0.1±0.2;0.2	0.1±0.2;0.2
Aug, 1995	I-131	Mi-9297, 9298	A	0.0±0.2;0.2	0.1±0.2;0.2
Aug, 1995	K-40	Mi-9297, 9298	A	1,727.8±180.0;296.0	1,602.7±172.0;277.7
Sep, 1995	H-3	Ww-9252, 9253	A	530.9±98.7;122.3	538.0±99.0;123.1

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Sep, 1995	I-131	Mi-9327, 9328	A	0.1±0.2;0.2	0.1±0.2;0.2
Sep, 1995	Co-60	Ww-9396, 9397	A	2.1±2.5;2.5	0.7±3.0;3.0
Sep, 1995	Cs-137	Ww-9396, 9397	A	2.7±2.7;2.8	0.8±2.6;2.6
Sep, 1995	Gr. Beta	Ww-9396, 9397	A	0.7±1.4;1.4	1.8±1.3;1.3
Sep, 1995	H-3	Ww-9396, 9397	A	14.9±76.6;76.6	48.9±78.2;78.5
Sep, 1995	H-3	Sw - 10075, 10076	A	262.1±88.0;94.9	265.7±88.1;95.3
Sep, 1995	Sr-89	Sw - 10075, 10076	A	-1.1±1.0;1.0	0.8±1.0;1.0
Sep, 1995	Sr-90	Sw - 10075, 10076	A	0.6±0.3;0.3	0.3±0.2;0.2
Sep, 1995	I-131	Mi-9350, 9351	A	-0.1±0.2;0.2	0.1±0.2;0.2
Sep, 1995	K-40	Mi-9350, 9351	A	1,335.3±163.0;244.0	1,521.4±179.0;273.6
Sep, 1995	I-131	Mi - 9463, 9464	A	0.1±0.2;0.2	0.1±0.2;0.2
Sep, 1995	K-40	Mi-9463, 9464	A	1,814.9±139.0;283.3	1,743.1±180.0;297.7
Sep, 1995	K-40	Bs - 9710, 9711	A	8.3±0.4;0.9	8.8±0.3;0.9
Sep, 1995	Gr. Beta	Cw - 9486, 9487	A	0.4±1.2;1.2	-0.9±1.4;1.4
Sep, 1995	Gr. Beta	Cw-9486, 9487	A	3.2±1.5;1.6	3.4±1.6;1.7
Sep, 1995	Cs-137	So - 9562, 9563	A	0.4±0.0;0.0	0.5±0.0;0.1
Sep, 1995	K-40	So - 9562, 9563	A	15.0±0.4;1.6	15.7±0.7;1.7
Sep, 1995	Co-60	Ve-9515, 9516	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Sep, 1995	Cs-137	Ve-9515, 9516	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Sep, 1995	I-131	Mi-9611, 9612	A	0.1±0.2;0.2	0.1±0.2;0.2
Sep, 1995	K-40	Mi-9611, 9612	A	1,463.6±163.0;257.3	1,381.6±117.0;221.3
Sep, 1995	H-3	Sw-9583, 9584	A	191.8±84.4;88.3	59.6±78.6;79.0
Sep, 1995	Gr. Beta	Lw - 9632, 9633	A	4.9±0.9;1.2	4.2±0.8;1.0
Sep, 1995	Co-60	Lw-9632, 9633	A	0.2±2.5;2.5	0.7±1.9;1.9
Sep, 1995	Cs-134	Lw-9632, 9633	A	-1.0±2.5;2.5	0.3±2.3;2.3
Sep, 1995	Cs-137	Lw-9632, 9633	A	0.7±2.7;2.7	2.0±2.0;2.0
Sep, 1995	I-131	Lw-9632, 9633	A	-0.0±0.2;0.2	0.2±0.2;0.2
Sep, 1995	I-131(g)	Lw-9632, 9633	A	-1.2±7.9;7.9	-1.8±6.9;6.9
Sep, 1995	K-40	Lw-9632, 9633	A	73.2±35.1;35.9	84.5±38.9;39.8
Sep, 1995	I-131	Mi-9677, 9678	A	0.1±0.2;0.2	-0.1±0.2;0.2
Sep, 1995	K-40	Mi-9677, 9678	A	1,579.6±149.0;261.4	1,387.5±150.0;241.1
Sep, 1995	Gr. Beta	Cw-9654, 9655	A	3.9±1.5;1.6	4.0±1.5;1.6
Sep, 1995	Gr. Beta	Cw-9654, 9655	A	-0.4±1.1;1.1	0.2±1.1;1.1
Sep, 1995	Co-60	Mi-9758, 9759	A	0.1±2.3;2.3	-1.1±5.6;5.6
Sep, 1995	Cs-137	Mi-9758, 9759	A	0.2±2.1;2.1	3.3±4.1;4.2
Sep, 1995	I-131	Mi-9758, 9759	A	0.0±0.1;0.1	0.1±0.1;0.1



Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Sep, 1995	K-40	Ve-9781, 9782	A	3.7±0.3;0.5	3.9±0.4;0.5
Sep, 1995	Gr. Alpha	Ww - 9917, 9918	A	1.0±1.2;1.2	0.2±1.3;1.3
Sep, 1995	Gr. Beta	Ww - 9917, 9918	A	2.0±1.6;1.6	1.5±1.5;1.6
Sep, 1995	K-40	Ww - 9917, 9918	A	61.6±27.2;27.9	55.5±30.1;30.6
Sep, 1995	Gr. Beta	Swu - 10054, 10055	A	2.9±0.7;0.8	3.0±0.6;0.8
Sep, 1995	H-3	Swu - 10054, 10055	A	272.2±86.6;94.1	186.8±83.0;86.8
Sep, 1995	Gr. Beta	Cw-9848, 9849	A	10.1±2.1;2.6	10.6±2.0;2.6
Sep, 1995	Gr. Beta	Cw-9848, 9849	A	0.6±1.1;1.1	0.1±1.1;1.1
Sep, 1995	H-3	Cw-9848, 9849	A	2.4±75.6;75.6	-2.9±75.4;75.4
Sep, 1995	I-131	Mi-9873, 9874	A	0.1±0.2;0.2	0.3±0.3;0.3
Sep, 1995	Co-60	Sw - 10174, 10175	A	-0.2±1.9;1.9	0.1±3.3;3.3
Sep, 1995	Cs-137	Sw - 10174, 10175	A	-0.1±2.9;2.9	-0.1±2.9;2.9
Sep, 1995	H-3	Ww-9988, 9989	A	126.1±81.2;83.0	18.3±76.3;76.4
Sep, 1995	Gr. Beta	Sw-10033, 10034	A	1.8±0.5;0.5	1.9±0.5;0.5
Sep, 1995	H-3	P-10216, 10217	A	76.4±78.7;79.4	74.7±78.6;79.2
Sep, 1995	H-3	Sw-10261, 10262	A	279.1±88.4;96.2	300.6±89.3;98.2
Sep, 1995	Gr. Beta	Ve - 10012, 10013	A	5.7±0.3;0.6	5.0±0.4;0.7
Sep, 1995	I-131	Mi-10120, 10121	A	0.1±0.1;0.1	0.0±0.1;0.1
Sep, 1995	K-40	Mi-10120, 10121	A	1,446.6±163.0;255.5	1,300.9±145.0;228.7
Sep, 1995	H-3	Sw-10195, 10196	A	-19.6±74.7;74.7	103.2±80.3;81.5
Sep, 1995	Gr. Beta	Cw - 10240, 10241	A	2.8±1.4;1.5	3.7±1.5;1.6
Sep, 1995	Gr. Beta	Cw - 10240, 10241	A	0.6±1.2;1.2	2.4±1.3;1.3
Sep, 1995	H-3	Sw-10150, 10151	A	119.1±81.0;82.6	129.8±81.5;83.4
Oct, 1995	Gr. Beta	Sw - 10282, 10283	A	2.2±0.5;0.6	1.9±0.5;0.5
Oct, 1995	H-3	Ww - 10349, 10350	A	64.9±80.2;80.7	47.4±79.4;79.7
Oct, 1995	Co-60	Ww-10349, 10350	A	0.1±1.2;1.2	1.5±2.1;2.1
Oct, 1995	Cs-137	Ww-10349, 10350	A	0.8±1.2;1.2	0.1±2.2;2.2
Oct, 1995	K-40	Ve-10370, 10371	A	3.3±0.5;0.6	3.3±0.5;0.6
Oct, 1995	Co-60	F-10491, 10492	A	-0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Cs-137	F-10491, 10492	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Oct, 1995	Co-60	Ap - 10752, 10753	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Oct, 1995	Cs-134	Ap - 10752, 10753	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Cs-137	Ap - 10752, 10753	A	-0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	I-131(g)	Ap - 10752, 10753	A	0.0±0.0;0.0	-0.0±0.0;0.0
Oct, 1995	K-40	Ap - 10752, 10753	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Co-60	Ap - 11141, 11142	A	0.0±0.0;0.0	0.0±0.0;0.0



Table A-4. In-house "duplicate" program.

Date Collected Analysis		Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Oct, 1995	Cs-137	Ap - 11141, 11142	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Co-60	Mi - 10324, 10325	A	0.3±2.2;2.2	-1.0±3.2;3.2
Oct, 1995	Cs-134	Mi - 10324, 10325	A	1.4±1.9;1.9	-1.0±2.6;2.6
Oct, 1995	Cs-137	Mi - 10324, 10325	A	0.3±2.1;2.1	1.0±2.6;2.6
Oct, 1995	I-131	Mi - 10324, 10325	A	0.1±0.1;0.1	0.1±0.2;0.2
Oct, 1995	I-131(g)	Mi - 10324, 10325	A	-0.9±2.7;2.7	1.2±3.3;3.3
Oct, 1995	K-40	Mi - 10324, 10325	A	1,440.7±88.9;215.2	1,432.5±120.0;228.8
Oct, 1995	Sr-89	Mi - 10324, 10325	A	-0.5±0.9;0.9	-1.3±0.9;0.9
Oct, 1995	Sr-90	Mi - 10324, 10325	A	1.7±0.4;0.4	1.7±0.4;0.4
Oct, 1995	I-131	Wwu-10392, 10393	A	0.0±0.2;0.2	0.0±0.2;0.2
Oct, 1995	Co-60	F-10470, 10471	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Cs-137	F-10470, 10471	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	H-3	Sw - 10413, 10414	A	41.1±77.4;77.6	62.3±78.3;78.8
Oct, 1995	H-3	Ww-10437, 10438	A	81.6±78.1;78.9	-10.6±73.8;73.9
Oct, 1995	I-131	Mi - 10512, 10513	A	0.1±0.1;0.1	0.1±0.2;0.2
Oct, 1995	Co-60	So - 10577, 10578	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Cs-134	So - 10577, 10578	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Cs-137	So - 10577, 10578	A	0.2±0.0;0.0	0.2±0.0;0.0
Oct, 1995	Gr. Beta	So - 10577, 10578	A	18.4±3.0;3.5	20.1±3.0;3.6
Oct, 1995	K-40	So - 10577, 10578	A	19.0±0.6;2.0	18.5±0.6;1.9
Oct, 1995	I-131	Mi - 10598, 10599	A	0.0±0.2;0.2	-0.1±0.1;0.1
Oct, 1995	Co-60	F - 10666, 10667	A	-0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Cs-137	F - 10666, 10667	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	H-3	Ww - 11206, 11207	A	144.1±82.1;84.4	298.7±106.1;113.6
Oct, 1995	Co-60	F - 10687, 10688	A	-0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Cs-137	F - 10687, 10688	A	0.0±0.0;0.0	-0.0±0.0;0.0
Oct, 1995	I-131	Mi - 10710, 10711	A	-0.1±0.2;0.2	0.0±0.2;0.2
Oct, 1995	H-3	Ww - 10797, 10798	A	255.7±88.0;94.6	190.9±85.4;89.3
Oct, 1995	K-40	F - 10882, 10883	A	2.4±0.3;0.4	2.3±0.5;0.5
Oct, 1995	Gr. Beta	Cw - 10826, 10827	A	2.0±1.3;1.4	1.1±1.3;1.3
Oct, 1995	Gr. Beta	Swu - 10923, 10924	A	2.4±0.6;0.7	2.7±0.6;0.7
Oct, 1995	H-3	Swu - 10923, 10924	A	908.5±108.7;164.6	878.3±107.7;160.9
Oct, 1995	Cs-137	F - 10969, 10970	A	0.0±0.0;0.0	0.1±0.0;0.0
Oct, 1995	Gr. Beta	F - 10969, 10970	A	2.3±0.1;0.2	2.2±0.1;0.2
Oct, 1995	K-40	F - 10969, 10970	A	2.1±0.4;0.4	1.9±0.4;0.4
Oct, 1995	Gr. Beta	Cw - 10773, 10774	A	8.4±1.9;2.3	9.9±2.0;2.5

Table A-4. In-house "duplicate" program.

Date Collected Analysis		Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Oct, 1995	Gr. Beta	Cw - 10773, 10774	A	-0.3±1.1;1.1	0.9±1.1;1.1
Oct, 1995	H-3	Cw - 10773, 10774	A	51.7±77.8;78.1	67.5±78.5;79.0
Oct, 1995	Gr. Beta	Cw - 10858, 10859	A	3.8±1.5;1.6	5.5±1.6;1.8
Oct, 1995	Gr. Beta	Cw - 10858, 10859	A	0.2±1.1;1.1	-0.3±1.1;1.1
Oct, 1995	Cs-137	Bs - 11056, 11057	A	0.3±0.0;0.0	0.3±0.0;0.0
Oct, 1995	K-40	Bs - 11056, 11057	A	18.5±0.4;1.9	18.3±0.4;1.9
Oct, 1995	K-40	F - 11078, 11079	A	2.7±0.2;0.3	2.7±0.1;0.3
Oct, 1995	Gr. Beta	Cw - 11261, 11262	A	3.4±1.5;1.6	3.8±1.5;1.6
Oct, 1995	Gr. Beta	Cw - 11261, 11262	A	-1.0±1.0;1.0	-0.1±1.1;1.1
Oct, 1995	I-131	Mi - 11162, 11163	A	0.2±0.2;0.2	0.1±0.2;0.2
Oct, 1995	Co-60	Lw - 11185, 11186	A	0.3±2.0;2.0	0.1±3.9;3.9
Oct, 1995	Cs-137	Lw - 11185, 11186	A	1.0±2.0;2.0	1.4±3.3;3.3
Oct, 1995	Gr. Beta	Lw - 11185, 11186	A	7.9±1.4;1.8	6.7±1.3;1.6
Oct, 1995	I-131	Mi - 11284, 11285	A	0.2±0.3;0.3	0.2±0.2;0.2
Oct, 1995	K-40	Mi - 11284, 11285	A	1,759.4±182.0;300.6	1,581.9±164.0;270.5
Oct, 1995	Gr. Beta	Dw - 11565, 11566	A	2.4±0.5;0.6	2.6±0.5;0.6
Oct, 1995	I-131	Dw - 11565, 11566	A	-0.1±0.3;0.3	0.2±0.3;0.3
Oct, 1995	Gr. Alpha	Sw - 11309, 11310	A	0.6±0.5;0.5	1.2±0.6;0.6
Oct, 1995	Gr. Beta	Sw - 11309, 11310	A	3.1±0.7;0.8	2.6±0.6;0.7
Oct, 1995	I-131	Mi - 11351, 11352	A	0.0±0.2;0.2	0.0±0.2;0.2
Oct, 1995	K-40	Mi - 11351, 11352	A	1,492.6±166.0;262.2	1,431.8±160.0;252.0
Oct, 1995	H-3	Sw - 11330, 11331	A	83.5±77.8;78.6	106.4±78.9;80.2
Oct, 1995	I-131	Mi - 11407, 11408	A	-0.1±0.2;0.2	0.1±0.2;0.2
Nov, 1995	I-131	Mi - 11433, 11434	A	-0.1±0.2;0.2	0.1±0.1;0.1
Nov, 1995	K-40	Mi - 11433, 11434	A	1,446.0±167.0;258.0	1,450.8±119.0;230.4
Nov, 1995	Sr-89	Mi - 11433, 11434	A	-0.1±1.3;1.3	-0.1±1.2;1.2
Nov, 1995	Sr-90	Mi - 11433, 11434	A	1.9±0.5;0.5	1.9±0.5;0.5
Nov, 1995	Gr. Beta	Bs - 11453, 11454	A	8.3±1.5;1.7	7.1±1.4;1.6
Nov, 1995	K-40	Bs - 11453, 11454	A	13.4±0.7;1.5	14.4±1.0;1.8
Nov, 1995	I-131	Mi - 11476, 11477	A	-0.0±0.2;0.2	0.1±0.2;0.2
Nov, 1995	K-40	Mi - 11476, 11477	A	1,425.6±155.0;248.2	1,379.5±93.1;209.4
Nov, 1995	Sr-89	Mi - 11476, 11477	A	0.2±1.6;1.6	0.7±1.2;1.2
Nov, 1995	Sr-90	Mi - 11476, 11477	A	1.6±0.6;0.6	0.7±0.4;0.4
Nov, 1995	Gr. Beta	Ww - 11657, 11658	A	0.4±0.5;0.5	0.5±0.5;0.5
Nov, 1995	H-3	Ww - 11657, 11658	A	110.2±79.0;80.4	172.2±81.7;85.0
Nov, 1995	H-3	Sw - 11519, 11520	A	86.1±78.0;78.8	10.3±74.5;74.5

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Nov, 1995	Co-60	Ww - 11837, 11838	A	0.7±1.5;1.5	0.1±3.3;3.3
Nov, 1995	Cs-137	Ww - 11837, 11838	A	0.1±1.7;1.7	-0.5±3.0;3.0
Nov, 1995	K-40	Mi - 11588, 11589	A	1,282.9±161.0;237.4	1,390.4±145.0;238.3
Nov, 1995	I-131	Mi - 11611, 11612	A	0.0±0.2;0.2	0.1±0.2;0.2
Nov, 1995	K-40	Mi - 11611, 11612	A	1,368.1±112.0;217.2	1,291.1±158.0;236.2
Nov, 1995	Gr. Beta	Cw - 11678, 11679	A	2.7±1.5;1.6	2.1±1.4;1.4
Nov, 1995	I-131	Mi - 11786, 11787	A	0.1±0.2;0.2	-0.1±0.2;0.2
Nov, 1995	K-40	Mi - 11786, 11787	A	1,493.0±100.0;226.3	1,459.1±170.0;261.3
Nov, 1995	Gr. Beta	Cw - 11865, 11866	A	2.0±1.4;1.4	1.1±1.3;1.4
Nov, 1995	Co-60	Lw - 11926, 11927	A	-0.7±2.2;2.2	-1.4±3.3;3.3
Nov, 1995	Cs-137	Lw - 11926, 11927	A	1.4±2.0;2.0	1.7±2.7;2.7
Nov, 1995	Gr. Beta	Lw - 11926, 11927	A	3.6±0.9;1.1	4.3±1.0;1.2
Nov, 1995	Co-60	Pw - 12451, 12452	A	0.1±1.6;1.6	1.6±2.0;2.0
Nov, 1995	Cs-137	Pw - 12451, 12452	A	-1.1±1.7;1.7	0.9±2.5;2.5
Nov, 1995	H-3	Ww - 12659, 12660	A	10,454.1±283.5;1,449.8	10,315.0±281.7;1,430.9
Nov, 1995	K-40	G - 12184, 12185	A	7.1±0.5;0.9	7.2±0.6;0.9
Nov, 1995	Gr. Beta	Dw - 12229, 12230	A	1.5±0.4;0.5	1.5±0.5;0.5
Nov, 1995	H-3	Dw - 12229, 12230	A	48.4±76.6;76.8	70.9±77.6;78.2
Dec, 1995	Cs-137	So - 12430, 12431	A	0.2±0.1;0.1	0.2±0.1;0.1
Dec, 1995	Gr. Alpha	So - 12430, 12431	A	15.7±4.5;4.7	10.9±4.1;4.2
Dec, 1995	Gr. Beta	So - 12430, 12431	A	22.4±2.9;3.6	23.1±3.0;3.8
Dec, 1995	K-40	So - 12430, 12431	A	16.7±1.3;2.1	17.7±1.4;2.2
Dec, 1995	Co-60	Lw - 12152, 12153	A	1.4±3.3;3.3	3.4±2.1;2.2
Dec, 1995	Cs-137	Lw - 12152, 12153	A	-0.1±3.2;3.2	0.4±2.9;2.9
Dec, 1995	Gr. Beta	Lw - 12152, 12153	A	5.2±1.3;1.5	4.9±1.2;1.4
Dec, 1995	I-131	Mi - 12250, 12251	A	0.1±0.2;0.2	0.2±0.2;0.2
Dec, 1995	K-40	Mi - 12250, 12251	A	1,470.3±163.0;258.0	1,386.6±126.0;226.8
Dec, 1995	Co-60	Ww - 12298, 12299	A	0.4±2.4;2.4	0.2±4.1;4.1
Dec, 1995	Cs-137	Ww - 12298, 12299	A	0.2±2.1;2.1	1.5±2.8;2.8
Dec, 1995	H-3	Ww - 12298, 12299	A	42.8±78.0;78.2	99.8±80.5;81.7
Dec, 1995	Co-60	Lw - 12380, 12381	A	1.3±2.4;2.4	2.2±2.2;2.3
Dec, 1995	Cs-134	Lw - 12380, 12381	A	0.5±2.1;2.1	2.0±2.2;2.2
Dec, 1995	Cs-137	Lw - 12380, 12381	A	0.8±2.5;2.5	1.2±2.4;2.4
Dec, 1995	I-131	Lw - 12380, 12381	A	0.1±0.1;0.1	0.1±0.2;0.2
Dec, 1995	I-131(g)	Lw - 12380, 12381	A	-7.4±13.8;13.8	4.7±13.4;13.4
Dec, 1995	K-40	Lw - 12380, 12381	A	129.0±41.2;43.2	133.0±34.7;37.2

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Dec, 1995	I-131	Mi - 12325, 12326	A	-0.1±0.2;0.2	0.2±0.2;0.2
Dec, 1995	K-40	Mi - 12325, 12326	A	1,409.0±172.0;257.5	1,438.6±169.0;258.5
Dec, 1995	H-3	Ww - 12347, 12348	A	77.3±78.9;79.6	87.6±79.3;80.2
Dec, 1995	Co-60	F - 12688, 12689	A	0.0±0.0;0.0	0.0±0.0;0.0
Dec, 1995	Cs-134	F - 12688, 12689	A	0.0±0.0;0.0	-0.0±0.0;0.0
Dec, 1995	Cs-137	F - 12688, 12689	A	0.0±0.0;0.0	0.0±0.0;0.0
Dec, 1995	I-131(g)	F - 12688, 12689	A	-0.0±0.0;0.0	0.0±0.0;0.0
Dec, 1995	K-40	F - 12688, 12689	A	2.4±0.3;0.4	2.5±0.4;0.4
Dec, 1995	Co-60	Pw - 12945, 12946	A	0.3±2.8;2.8	1.4±2.0;2.0
Dec, 1995	Cs-137	Pw - 12945, 12946	A	1.5±2.6;2.6	0.1±2.2;2.2

<sup>a</sup> All concentrations are reported in pCi/L, except solid samples, which are reported in pCi/g wet. Results are reported as Activity±Counting Error;Total Propagated Uncertainty (TPU).

<sup>b</sup> Lab codes are comprised of the sample media and the sample numbers. Client codes have been eliminated to protect client anonymity.

<sup>c</sup> Acceptance is based on the difference of the two results divided by the pooled standard deviation being less than two, where, the pooled standard deviation is the square root of the sum of the squares of the TPU's.

APPENDIX VI

ERRATA DATA



LASALLE STATION UNIT ONE

ACTUAL 1994  
 MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES  
 PERIOD OF RELEASE - 01/01/94 TO 12/31/94 CALCULATED 02/07/96  
 INFANT RECEPTOR  
 DATABASE CONTAINS DATA THROUGH 12/31/94

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	1.23E-03 (WSW )	2.57E-08 (WSW )	3.63E-09 (WSW )	2.50E-09 (WSW )	1.23E-03 (WSW )
BETA AIR (MRAD)	4.41E-05 (ESE )	9.24E-10 (ESE )	1.29E-09 (ESE )	1.10E-09 (ESE )	4.41E-05 (ESE )
TOT. BODY (MREM)	9.29E-04 (WSW )	1.93E-08 (WSW )	2.73E-09 (WSW )	1.88E-09 (WSW )	9.29E-04 (WSW )
SKIN (MREM)	9.83E-04 (WSW )	2.05E-08 (WSW )	3.28E-09 (WSW )	2.26E-09 (WSW )	9.83E-04 (WSW )
ORGAN (MREM)	4.20E-03 (ESE )	1.52E-03 (ESE )	4.31E-03 (ESE )	3.43E-03 (ESE )	1.35E-02 (ESE )
	THYROID	LUNG	THYROID	THYROID	THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT ONE

ACTUAL 1994  
 COMPLIANCE STATUS - 10CFR 50 APP. I  
 INFANT RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.02	0.00	0.00	0.00	10.0	0.01
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.04	0.00	0.00	0.00	5.0	0.02
SKIN (MREM)	7.5	0.01	0.00	0.00	0.00	15.0	0.01
ORGAN (MREM)	7.5	0.06	0.02	0.06	0.05	15.0	0.09
		THYROID	LUNG	THYROID	THYROID		THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995



LASALLE STATION UNIT ONE

ACTUAL 1994

MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES

PERIOD OF RELEASE - 01/01/94 TO 12/31/94 CALCULATED 02/07/96

CHILD RECEPTOR

DATABASE CONTAINS DATA THROUGH 12/31/94

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	1.23E-03	2.57E-08	3.63E-09	2.50E-09	1.23E-03
(MRAD)	(WSW )	(WSW )	(WSW )	(WSW )	(WSW )
BETA AIR	4.41E-05	9.24E-10	1.29E-09	1.10E-09	4.41E-05
(MRAD)	(ESE )	(ESE )	(ESE )	(ESE )	(ESE )
TOT. BODY	9.29E-04	1.93E-08	2.73E-09	1.88E-09	9.29E-04
(MREM)	(WSW )	(WSW )	(WSW )	(WSW )	(WSW )
SKIN	9.83E-04	2.05E-08	3.28E-09	2.26E-09	9.83E-04
(MREM)	(WSW )	(WSW )	(WSW )	(WSW )	(WSW )
ORGAN	3.50E-03	6.81E-03	1.83E-02	1.10E-02	3.96E-02
(MREM)	(NNE )	(NNE )	(NNE )	(NNE )	(NNE )
	THYROID	GI_LLI	GI_LLI	THYROID	GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT ONE

ACTUAL 1994

COMPLIANCE STATUS - 10CFR 50 APP. I

CHILD RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.02	0.00	0.00	0.00	10.0	0.01
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.04	0.00	0.00	0.00	5.0	0.02
SKIN (MREM)	7.5	0.01	0.00	0.00	0.00	15.0	0.01
ORGAN (MREM)	7.5	0.05	0.09	0.24	0.15	15.0	0.26
		THYROID	GI_LLI	GI_LLI	THYROID		GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.1 JULY 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT ONE

ACTUAL 1994  
 MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES  
 PERIOD OF RELEASE - 01/01/94 TO 12/31/94 CALCULATED 02/07/96  
 TEENAGER RECEPTOR  
 DATABASE CONTAINS DATA THROUGH 12/31/94

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	1.23E-03	2.57E-08	3.63E-09	2.50E-09	1.23E-03
(MRAD)	(WSW )	(WSW )	(WSW )	(WSW )	(WSW )
BETA AIR	4.41E-05	9.24E-10	1.29E-09	1.10E-09	4.41E-05
(MRAD)	(ESE )	(ESE )	(ESE )	(ESE )	(ESE )
TOT. BODY	9.29E-04	1.93E-08	2.73E-09	1.88E-09	9.29E-04
(MREM)	(WSW )	(WSW )	(WSW )	(WSW )	(WSW )
SKIN	9.83E-04	2.05E-08	3.28E-09	2.26E-09	9.83E-04
(MREM)	(WSW )	(WSW )	(WSW )	(WSW )	(WSW )
ORGAN	2.56E-03	4.53E-03	1.26E-02	7.27E-03	2.70E-02
(MREM)	(NNE )	(NNE )	(NNE )	(NNE )	(NNE )
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

RESULTS BASED UPON:

ODCM ANNEX REVISION 1.1 JULY 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT ONE

ACTUAL 1994  
 COMPLIANCE STATUS - 10CFR 50 APP. I  
 TEENAGER RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.02	0.00	0.00	0.00	10.0	0.01
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.04	0.00	0.00	0.00	5.0	0.02
SKIN (MREM)	7.5	0.01	0.00	0.00	0.00	15.0	0.01
ORGAN (MREM)	7.5	0.03	0.06	0.17	0.10	15.0	0.18
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI	

RESULTS BASED UPON:

ODCM ANNEX REVISION 1.1 JULY 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT ONE

ACTUAL 1994  
 MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES  
 PERIOD OF RELEASE - 01/01/94 TO 12/31/94 CALCULATED 02/07/96  
 ADULT RECEPTOR  
 DATABASE CONTAINS DATA THROUGH 12/31/94

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR	1.23E-03	2.57E-08	3.63E-09	2.50E-09	1.23E-03
(MRAD)	(WSW )	(WSW )	(WSW )	(WSW )	(WSW )
BETA AIR	4.41E-05	9.24E-10	1.29E-09	1.10E-09	4.41E-05
(MRAD)	(ESE )	(ESE )	(ESE )	(ESE )	(ESE )
TOT. BODY	9.29E-04	1.93E-08	2.73E-09	1.88E-09	9.29E-04
(MREM)	(WSW )	(WSW )	(WSW )	(WSW )	(WSW )
SKIN	9.83E-04	2.05E-08	3.28E-09	2.26E-09	9.83E-04
(MREM)	(WSW )	(WSW )	(WSW )	(WSW )	(WSW )
ORGAN	2.89E-03	4.20E-03	1.17E-02	6.89E-03	2.56E-02
(MREM)	(NNE )	(NNE )	(NNE )	(NNE )	(NNE )
	GI_LLI	GI_LLI	GI_LLI	GI_LLI	GI_LLI

RESULTS BASED UPON:

ODCM ANNEX REVISION 1.1 JULY 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

LASALLE STATION UNIT ONE

ACTUAL 1994  
 COMPLIANCE STATUS - 10CFR 50 APP. I  
 ADULT RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.02	0.00	0.00	0.00	10.0	0.01
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.04	0.00	0.00	0.00	5.0	0.02
SKIN (MREM)	7.5	0.01	0.00	0.00	0.00	15.0	0.01
ORGAN (MREM)	7.5	0.04	0.06	0.16	0.09	15.0	0.17
		GI_LLI	GI_LLI	GI_LLI	GI_LLI		GI_LLI

RESULTS BASED UPON:

ODCM ANNEX REVISION 1.1 JULY 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995