United States
Environmental Protection
Agency

Eastern Environmental
Radiation Facility
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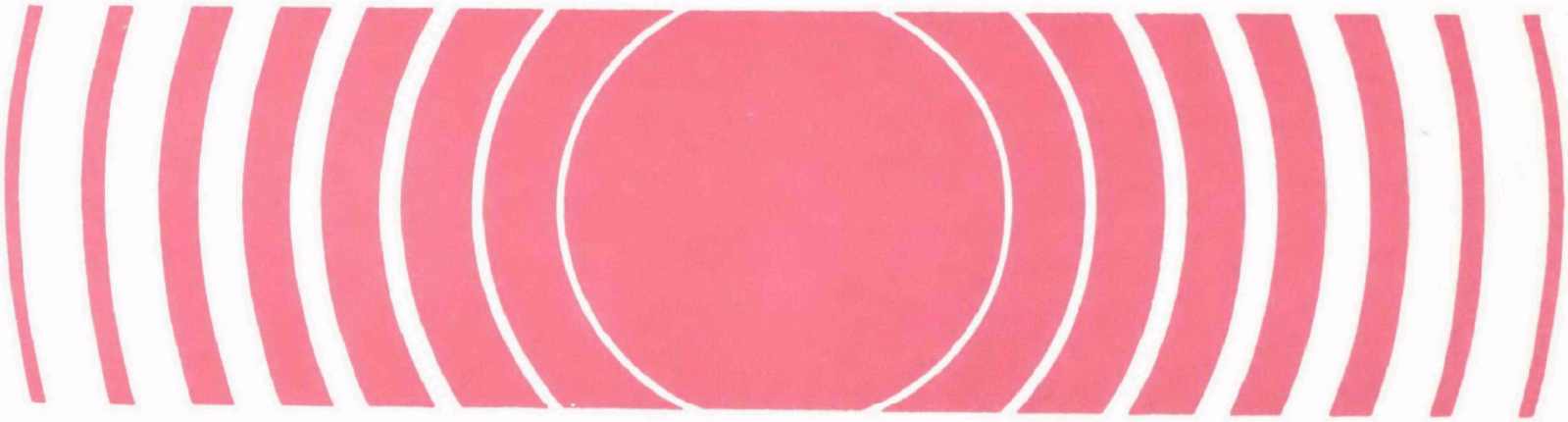
Environmental Radiation Data

Report 46

April 1986 - June 1986

REVISED EDITION



E N V I R O N M E N T A L

R A D I A T I O N

D A T A

REPORT 46

April - June 1986

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Office of Radiation Programs

Revised Edition

Following the Chernobyl accident that occurred on April 26, 1986, the Environmental Protection Agency(EPA) augmented its sample collection and analysis procedure to provide a more complete description of the effects from debris that reached the United States.

Synopsis of the Chernobyl Accident

According to Soviet reports, the accident began at 1:23 a.m., local time, on April 26, 1986, during low power turbine tests in which a number of procedural errors led to excessive fuel temperatures resulting in hydrogen being evolved in the reactor, a series of explosions, and an extensive fire in the graphite moderator that lasted some twelve days. The combination of high temperature combustion within the burning graphite and the dry weather conditions in the area of the accident contributed to the debris being carried high aloft and dispersed widely across Northern Europe.

Soviet estimates of plume movement indicated movement to the north and west during the first two to three days then to south for three days following April 29. Atmospheric levels of radioactivity reached a peak on May 2 as measured in Oxfordshire, U.K. By May 5, the contaminated air masses had spread west over much of Europe and east over most of the Soviet Union, and fallout was first observed in Canadian air samples on May 2.

The first measured radioactivity measured by an ERAMS sampling station was a precipitation sample collected at Portland, Oregon, on May 4. This was followed by measurements at Olympia, Washington, on May 5, Bismarck, North Dakota, and Idaho Falls, Idaho, on May 6, and Boise, Idaho, and Lansing, Michigan, on May 7.

EPA'S Response to Chernobyl

Based on the anticipated arrival of debris during the first few days of May, EPA began notifying the states and the air particulate station operators on April 29 to increase the sample frequency from the usual twice weekly to once each day. Air particulates and all precipitation samples were then sent to the laboratory by overnight mail for analysis. This increased sampling frequency was continued throughout the third week of June until airborne activity returned to background levels.

EPA also requested that FDA notify all sampling stations to initiate collection of milk samples at the rate of twice per week instead of the usual once per month. This augmented milk collection was initiated during the first week of May, and it continued until the last week of

June, at which time the radioactivity in milk had essentially dropped to pre-accident levels.

This document contains an expanded data compilation that presents raw data obtained from the ERAMS pasteurized milk network and the ERAMS air particulate network following the Chernobyl accident. Dose calculations and risk assessments are presently underway to evaluate the maximum individual doses and risks to the U.S. population that resulted from the accident.

Preface

Environmental Radiation Data (ERD) is compiled and distributed quarterly by the Office of Radiation Programs' Eastern Environmental Radiation Facility (EERF), Montgomery, Alabama, and contains data from the Environmental Radiation Ambient Monitoring System (ERAMS). Data from similar networks operated by contributing States, Canada, Mexico, and the Pan American Health Organization are reported in the ERD when available.

ERAMS was established in 1973 by the U. S. Environmental Protection Agency's Office of Radiation Programs (ORP). The ERAMS is comprised of nationwide sampling stations that provide air, surface and drinking water, and milk samples from which environmental radiation levels are derived. The major emphasis for ERAMS is toward identifying trends in the accumulation of long-lived radionuclides in the environment.

Sampling locations are selected to provide optimal population coverage while functioning to monitor fallout from nuclear devices and other forms of radioactive contamination of the environment. The radiation analyses performed on these samples include gross alpha and gross beta levels, gamma analyses for fission products, and specific analyses for uranium, plutonium, strontium, iodine, radium, krypton, and tritium. This monitoring effort also provides ancillary information on natural background levels and on releases into the environment from stationary sources such as nuclear power reactors, fuel fabrication facilities, and reprocessing plants.

The radiochemical procedures used by the EERF in processing the ERAMS samples are contained in Eastern Environmental Radiation Facility Radiochemistry Procedures Manual.

E N V I R O N M E N T A L R A D I A T I O N

D A T A

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In 1973, the U.S. Environmental Protection Agency's Office of Radiation Programs, established the Environmental Radiation Ambient Monitoring System(ERAMS) to provide continuous, accurate, and usable environmental radiation data to the public. For completeness, ERAMS data for all specific radionuclide analyses are reported as the calculated results indicate, whether the numbers are negative, zero, or positive.

Reporting Rationale

Frequently, concentrations of radionuclides in environmental media are close to zero. When the actual concentration of a nuclide is zero, the net counting results should statistically show a distribution of negative and positive numbers about zero. This occurs when the background count is subtracted from a sample which has only background activity. Prior to July 1975, ERAMS data were not reported numerically when the results were less than a specified reporting level or minimum detectable level. The present reporting procedure allows all the data to be reported and evaluated statistically without an arbitrary cutoff of small or negative numbers. This approach will facilitate estimates of bias in the nuclide analyses and will allow better evaluation of distributions and trends in environmental data.

When reviewing the data in this report, caution should be exercised in the interpretation of individual negative values. Obviously, a negative activity value has no physical significance. Such numbers, however, are significant when taken together with other observations which indicate that the true value of a distribution is near zero. When an average of many measurements produces a result less than zero, this indicates a negative bias in the measurement procedure.

(1) Reported Values

Specific Analyses - All specific radionuclide analyses will be reported as the counting results indicate, whether the number is negative, zero, or positive. All reported values are corrected for decay to the collection date.

Potassium concentrations are determined by specific activity analyses.

Gross Analyses - The actual value of gross radioactivity measurements will be reported, unless the value is below the minimum detectable level (MDL) at the 2 sigma confidence level, then < minimum detectable level will be reported.

MDL is defined as the 3 sigma error of the background. A tabulation of typical MDL's is given in the following table.

(2) Reported Error Terms

Each reported value for specific analyses will be accompanied by a counting error term at the 2 sigma (95%) confidence interval. Error terms are therefore reported as counting errors. At the very low levels characteristic of most ERAMS measurements, counting error is the greatest contributor to overall error.

(3) Significant Figures

No more than three significant figures will be reported. If a datum contains more than three figures, it will be rounded off to three figures.

(4) Reporting Levels

The reporting units, smallest increments for reporting, and minimum detectable levels for each isotope are shown in Table 1. Smallest increments are sometimes considerably smaller than minimum detectable amounts to avoid truncation errors in averaging.

(5) Averages

Averages will be calculated along with appropriate error terms in an annual summary and analysis of ERAMS data. In calculating these averages, all values of individual data including negative numbers will be utilized. Averages will not be included in ERD quarterly reports.

TABLE 1

ERAMS Reporting Increments and Minimum Detectable Levels

for Radionuclide Analyses

Radionuclide	Media	Reporting Units	Reporting Increments	Minimum Detectable Levels
Gross alpha	Water	pCi/l	1 pCi/l	2 pCi/l
Gross beta	Air	pCi/m^3	.01 pCi/m^3	.01 pCi/m^3
	Water	pCi/l	1 pCi/l	1 pCi/l
	Precipitation	nCi/m^2	.01 nCi/m^2	.01 $nCi/m^{2(a)}$
Tritium	Water	nCi/l	.1 nCi/l	.2 nCi/l
	Milk	nCi/l	.1 nCi/l	.2 nCi/l
Carbon-14	Milk	pCi/l	1 pCi/l	15 pCi/l
Krypton-85	Ambient Air	pCi/m^3	.1 pCi/m^3	2 pCi/m^3
Plutonium-238, 239	Air	aCi/m^3	.1 aCi/m^3	.015 $pCi^{(b)}$ per sample
	Milk	pCi/l	.001 pCi/l	.015 pCi per sample
	Water	pCi/l	.001 pCi/l	.015 pCi per sample
Uranium-234, 235,238	Air	aCi/m^3	.1 aCi/m^3	.015 $pCi^{(b)}$ per sample
	Milk	pCi/l	.001 pCi/l	.015 pCi per sample
	Water	pCi/l	.001 pCi/l	.015 pCi per sample
Radium-226	Water	pCi/l	.1 pCi/l	.1 pCi/l

Radionuclide	Media	Reporting Units	Reporting Increments	Minimum Detectable Levels
Strontium-90	Milk	pCi/l	.1 pCi/l	1 pCi/l
	Water	pCi/l	.1 pCi/l	1 pCi/l
Strontium-89	Milk	pCi/l	1 pCi/l	5 pCi/l(c)
Iodine-131	Milk	pCi/l	1 pCi/l	10 pCi/l(c)
	Water	pCi/l	1 pCi/l	10 pCi/l(c)
	Water (specific radiochemical analysis)	pCi/l	.1 pCi/l	.4 pCi/l
Iodine-129	Milk	fCi/l	.1 fCi/l	.4 fCi/l
Cesium-137	Milk	pCi/l	1 pCi/l	10 pCi/l
	Water	pCi/l	1 pCi/l	10 pCi/l
Barium-140	Milk	pCi/l	1 pCi/l	10 pCi/l(c)
	Water	pCi/l	1 pCi/l	10 pCi/l(c)
Potassium	Milk	g/l	.1 g/l	.12 g/l
	Water	g/l	.1 g/l	.12 g/l
Potassium-40	Water	pCi/l	1 pCi/l	100 pCi/l

(a) The value in terms of nCi/m^2 would be dependent on precipitation (mm).
(b) This value in terms of pCi/m^3 would be dependent on the air volume.
(c) Activity as of the day of counting.

ENVIRONMENTAL RADIATION AMBIENT MONITORING SYSTEM (ERAMS)

SECTION I. Air Program

Airborne Particulates and Precipitation

Gross beta radioactivity measurements and certain specific analyses are performed on air particulates and precipitation samples as indicator measurements in assessing the general (national) impact of all contributing sources on environmental levels of radiation.

Airborne particulates are collected continuously at field stations representing wide geographic coverage, including present and potential sources of environmental radioactivity. Sampling sites are located throughout the United States.

Filters (10-cm diameter synthetic fiber) from air samplers are changed twice weekly and field measurements are made with a G-M survey meter * at 5 hours and 29 hours after collection to allow for radon and thoron daughter product decay. Field estimates are reported to appropriate EPA officials by telephone or mail depending on the activity levels found.

The filters are sent to EERF for more sensitive analysis in a low background beta counter. Gamma scans are performed on all filters showing gross beta counts greater than 1 pCi/m3. The laboratory obtained values are usually lower than the field estimates due to the decay of naturally occurring radionuclides between the times of the two measurements.

Precipitation samples are collected at these field stations collecting air filters. These samples are also sent to the EERF where they are composited monthly for gamma scans, tritium, and gross beta activity measurements. Plutonium-238, -239, and uranium-234, -235, and -238 analyses are performed on samples which exceed 2 pCi/liter gross alpha.

* The counts at five hours for the Montgomery, Alabama station are performed on a low background beta counter.

Tables 2 - 4 present the monthly average gross beta concentrations in airborne particulates for April - June, 1986.

Tables 5 - 7 present the monthly average gross beta concentration in precipitation April - June, 1986.

The gamma emitters detected in the precipitation samples are shown in Table 9.1

Following the Chernobyl event on April 26, 1986, air particulate sampling was increased to once per day at all air stations. These samples were returned to the laboratory by express mail and analyzed both for gross beta and by using Ge spectrometry for gamma emitters. Because of the general interest in fission products in air following the Chernobyl event, the results for the Ge gamma spectrometry for May and June, 1986, are given in Table 4.1

Data for tritium in precipitation samples for April and June, 1986, at the selected stations are shown in Table 8. The results for May are shown separately in Table 9 due to the large number of samples received during the Chernobyl incident. Sampling for tritium was discontinued after the 16th of May because analyses failed to show any activity above normal.

A compilation of individual measurements is available from the EPA, EERF, Montgomery, AL 36109.

TABLE 2

AIRBORNE PARTICULATES
GROSS BETA CONCENTRATION
APRIL 1986

LOCATION	# SAM	5-HR FIELD ESTIMATE			EERF LAB MEASUREMENT		
		MAX	MIN	AVG	MAX	MIN	AVG
		(pCi/m^3)			(pCi/m^3)		
AK:JUNEAU	1	0.0	0.0	0.0	0.01	0.01	0.01
AL:ASHFORD	3	0.0	0.0	0.0	0.01	0.01	0.01
AL:MONTGOMERY	12	1.8	0.3	0.8	0.02	0.01	0.01
AR:LITTLE ROCK	10	1.0	0.0	0.3	0.02	0.01	0.01
AZ:PHOENIX	4	2.4	0.4	1.0	0.11	0.01	0.04
CA:BERKELEY	11	0.0	0.0	0.0	0.02	0.00	0.01
CA:LOS ANGELES	11	0.4	0.1	0.2	0.01	0.01	0.01
CO:DENVER	11	1.9	0.1	0.7	0.09	0.00	0.02
CT:HARTFORD	10	0.3	0.1	0.1	0.01	0.00	0.01
DE:WILMINGTON	9	0.4	0.0	0.2	0.01	0.00	0.01
FL:JACKSONVILLE	9	0.2	0.0	0.1	0.01	0.01	0.01
FL:MIAMI	11	0.2	0.0	0.0	0.02	0.00	0.01
HI:HONOLULU	9	0.2	0.1	0.1	0.01	0.00	0.00
IA:IOWA CITY	8	0.6	0.2	0.4	0.04	0.00	0.01
ID:BOISE	2	0.6	0.5	0.6	0.01	0.01	0.01
ID:IDAHO FALLS	8	0.0	0.0	0.0	0.02	0.00	0.01
IL:CHICAGO	9	0.6	0.0	0.3	0.03	0.01	0.02
IN:INDIANAPOLIS	6	0.8	0.5	0.6	0.02	0.01	0.01
KS:TOPEKA	11	2.4	0.4	1.2	0.03	0.01	0.01
KY:FRANKFORT	1	2.0	2.0	2.0	0.00	0.00	0.00
MA:LAWRENCE	1	0.2	0.2	0.2	0.00	0.00	0.00
ME:AUGUSTA	11	0.2	0.0	0.1	0.01	0.00	0.01
MI:LANSING	10	0.3	0.0	0.1	0.02	0.01	0.01
MN:MINNEAPOLIS	9	0.5	0.0	0.2	0.03	0.01	0.01
MO:JEFFERSON CITY	10	1.1	0.3	0.7	0.05	0.01	0.02
MS:JACKSON	10	1.0	0.3	0.5	0.13	0.01	0.03
MT:HELENA	1	1.0	1.0	1.0	0.01	0.01	0.01
NC:CHARLOTTE	13	0.4	0.1	0.2	0.03	0.01	0.02
NC:WILMINGTON	8	0.2	0.0	0.1	0.02	0.01	0.01
ND:BISMARCK	10	0.3	0.0	0.2	0.03	0.00	0.01
NE:LINCOLN	1	4.6	4.6	4.6	0.02	0.02	0.02
NH:CONCORD	12	0.2	0.0	0.1	0.01	0.00	0.01
NJ:TRENTON	11	1.2	0.0	0.4	0.02	0.00	0.01
NM:SANTA FE	12	0.7	0.2	0.3	0.02	0.00	0.01
NV:LAS VEGAS	10	0.2	0.1	0.1	0.04	0.01	0.01
NY:ALBANY	7	0.4	0.0	0.2	0.01	0.00	0.01

TABLE 2 (CONTINUED)

AIRBORNE PARTICULATES
GROSS BETA CONCENTRATION
APRIL 1986

LOCATION	# SAM	5-HR FIELD ESTIMATE			EERF LAB MEASUREMENT		
		MAX	MIN	AVG	MAX	MIN	AVG
		(pCi/m^3)			(pCi/m^3)		
NY:NEW YORK CITY	12	0.4	0.1	0.2	0.01	0.00	0.01
NY:NIAGARA FALLS	9	0.4	0.0	0.1	0.05	0.00	0.01
NY:SYRACUSE	5	0.7	0.0	0.2	0.02	0.00	0.01
NY:YAPHANK	10	0.1	0.0	0.0	0.01	0.00	0.00
OH:COLUMBUS	10	1.1	0.1	0.4	0.13	0.01	0.03
OH:PAINESVILLE	11	0.4	0.0	0.2	0.04	0.00	0.01
OH:TOLEDO	10	1.1	0.2	0.4	0.29	0.01	0.07
OK:OKLAHOMA CITY	4	0.6	0.2	0.5	0.02	0.01	0.01
OK:OKLAHOMA	2	0.4	0.3	0.4	0.01	0.01	0.01
OK:OKLAHOMA CITY	4	1.8	0.2	0.9	0.02	0.01	0.01
OR:PORTLAND	11	0.1	0.0	0.0	0.17	0.00	0.02
PA:GOLDSBORO	12	0.8	0.1	0.3	0.02	0.00	0.01
PA:HARRISBURG	9	0.3	0.0	0.1	0.01	0.00	0.01
PA:MIDDLETOWN	2	0.6	0.3	0.5	0.03	0.01	0.02
PA:PITTSBURGH	9	0.2	0.0	0.1	0.04	0.01	0.01
PA:THREE MILE ISL	8	0.7	0.0	0.2	0.02	0.00	0.01
RI:PROVIDENCE	6	0.4	0.1	0.2	0.01	0.00	0.00
SC:BARNWELL	1	0.0	0.0	0.0	0.00	0.00	0.00
SC:COLUMBIA	11	1.0	0.1	0.4	0.08	0.01	0.03
SD:PIERRE	9	0.6	0.1	0.3	0.02	0.00	0.01
TN:KNOXVILLE	12	1.8	0.2	0.7	0.02	0.01	0.01
TN:NASHVILLE	6	1.2	0.1	0.6	0.02	0.01	0.01
TX:AUSTIN	10	0.5	0.0	0.3	0.07	0.01	0.02
TX:EL PASO	10	0.8	0.2	0.4	0.03	0.01	0.02
UT:SALT LAKE CITY	1	0.5	0.5	0.5	0.05	0.05	0.05
VA:LYNCHBURG	12	1.9	0.1	0.8	0.23	0.00	0.03
VT:MONTPELIER	1	0.0	0.0	0.0	0.03	0.03	0.03
WA:OLYMPIA	9	0.2	0.0	0.1	0.05	0.00	0.01
WA:SPOKANE	11	0.4	0.0	0.3	0.10	0.00	0.02
WI:MADISON	9	1.6	0.1	0.5	0.02	0.00	0.01
WV:CHARLESTON	1	1.4	1.4	1.4	0.00	0.00	0.00

MINIMUM DETECTABLE LIMIT FOR FIELD ESTIMATES - .1 pCi/m3
MINIMUM DETECTABLE LIMIT FOR LAB MEASUREMENT - .01 pCi/m3

TABLE 3

AIRBORNE PARTICULATES
GROSS BETA CONCENTRATION
MAY 1986

LOCATION	# SAM	5-HR FIELD ESTIMATE			EERF LAB MEASUREMENT		
		MAX	MIN	AVG	MAX	MIN	AVG
		(pCi/m^3)			(pCi/m^3)		
AK:ANCHORAGE	23	0.2	0.0	0.1	0.46	0.00	0.13
AK:JUNEAU	15	0.1	0.0	0.0	0.09	0.00	0.04
AL:ASHFORD	22	0.0	0.0	0.0	1.06	0.01	0.26
AL:MONTGOMERY	20	7.2	0.4	2.0	2.54	0.01	0.63
AR:LITTLE ROCK	29	2.1	0.1	0.7	0.40	0.02	0.11
AZ:PHOENIX	30	4.3	0.0	2.5	1.84	0.04	0.57
CA:BERKELEY	31	0.7	0.0	0.1	1.24	0.00	0.22
CA:LOS ANGELES	29	1.6	0.2	0.7	0.96	0.01	0.29
CO:DENVER	31	3.0	0.4	1.6	1.02	0.03	0.35
CT:HARTFORD	25	0.9	0.1	0.4	0.34	0.01	0.11
DE:WILMINGTON	21	1.1	0.2	0.5	0.27	0.02	0.12
FL:JACKSONVILLE	28	1.0	0.0	0.3	0.54	0.02	0.12
FL:MIAMI	30	0.6	0.0	0.1	0.41	0.01	0.08
GA:ATLANTA	22	0.8	0.1	0.4	0.45	0.02	0.18
HI:HONOLULU	31	0.2	0.1	0.2	0.38	0.00	0.12
IA:IOWA CITY	20	0.7	0.2	0.4	0.90	0.00	0.28
ID:BOISE	27	1.7	0.1	0.5	2.12	0.01	0.36
ID:IDAHO FALLS	31	3.3	0.6	1.9	1.22	0.00	0.43
IL:CHICAGO	25	2.0	0.1	0.7	0.50	0.02	0.18
IN:INDIANAPOLIS	30	1.8	0.3	0.9	0.64	0.01	0.17
KS:TOPEKA	30	5.2	0.6	2.7	0.89	0.01	0.26
KY:FRANKFORT	20	2.5	0.0	1.2	0.44	0.02	0.15
LA:NEW ORLEANS	19	0.5	0.2	0.3	0.23	0.04	0.13
MA:LAWRENCE	30	2.1	0.2	0.5	0.56	0.00	0.11
ME:AUGUSTA	24	0.9	0.0	0.3	0.41	0.01	0.12
MI:LANSING	21	1.7	0.1	0.6	0.46	0.01	0.12
MN:MINNEAPOLIS	31	1.7	0.3	0.7	0.77	0.00	0.21
MO:JEFFERSON CITY	27	6.9	0.4	2.3	0.48	0.02	0.17
MS:JACKSON	31	1.7	0.2	0.7	0.47	0.01	0.14
MT:HELENA	27	10.5	0.2	4.4	0.63	0.01	0.23
NC:CHARLOTTE	28	1.1	0.3	0.7	0.58	0.01	0.23
NC:WILMINGTON	23	0.7	0.0	0.3	0.47	0.01	0.12
ND:BISMARCK	30	3.5	0.1	1.0	0.86	0.02	0.31
NE:LINCOLN	25	14.3	0.8	4.5	1.24	0.01	0.42
NH:CONCORD	29	1.1	0.2	0.5	0.39	0.01	0.11
NJ:TRENTON	24	3.5	0.3	1.2	1.02	0.01	0.13
NM:SANTA FE	31	1.5	0.5	0.9	0.30	0.01	0.12
NV:LAS VEGAS	23	1.0	0.1	0.4	1.07	0.02	0.32

TABLE 3 (CONTINUED)

AIRBORNE PARTICULATES
GROSS BETA CONCENTRATION
MAY 1986

LOCATION	# SAM	5-HR FIELD ESTIMATE			EERF LAB MEASUREMENT		
		MAX	MIN	AVG	MAX	MIN	AVG
		(pCi/m^3)			(pCi/m^3)		
NY:ALBANY	24	1.1	0.1	0.4	0.44	0.01	0.12
NY:NEW YORK CITY	20	1.7	0.2	0.7	0.39	0.00	0.13
NY:NIAGARA FALLS	27	2.0	0.1	0.7	0.27	0.01	0.11
NY:SYRACUSE	25	1.4	0.2	0.6	0.39	0.01	0.11
NY:YAPHANK	31	0.4	0.0	0.1	0.43	0.00	0.12
OH:COLUMBUS	29	2.1	0.1	1.1	1.08	0.02	0.34
OH:PAINESVILLE	25	0.9	0.1	0.5	0.35	0.01	0.10
OH:TOLEDO	28	3.6	0.2	0.9	1.17	0.01	0.23
OK:OKLAHOMA CITY	28	3.8	0.3	1.1	0.36	0.01	0.14
OR:PORTLAND	15	1.3	0.0	0.3	0.69	0.00	0.11
PA:GOLDSBORO	21	1.8	0.3	0.8	0.43	0.01	0.19
PA:HARRISBURG	30	1.8	0.1	0.6	0.67	0.02	0.19
PA:PITTSBURGH	23	0.6	0.0	0.3	0.34	0.01	0.10
PA:THREE MILE ISL	42	1.9	0.2	0.8	0.41	0.01	0.18
RI:PROVIDENCE	19	1.1	0.2	0.5	0.34	0.02	0.13
SC:BARNWELL	4	0.2	0.0	0.1	0.17	0.01	0.07
SC:COLUMBIA	29	1.6	0.2	0.7	1.07	0.01	0.20
SD:PIERRE	24	1.8	0.1	0.7	0.90	0.01	0.24
TN:KNOXVILLE	25	3.7	0.3	1.8	0.61	0.01	0.26
TN:NASHVILLE	28	2.0	0.0	0.9	0.52	0.01	0.21
TX:AUSTIN	28	0.6	0.1	0.3	0.19	0.01	0.07
TX:EL PASO	30	3.1	0.5	1.3	1.02	0.05	0.28
UT:SALT LAKE CITY	32	2.2	0.0	0.8	1.51	0.01	0.34
VA:LYNCHBURG	21	4.1	0.4	1.5	0.51	0.03	0.22
VA:VIRGINIA BEACH	14	0.3	0.0	0.1	0.22	0.01	0.07
VT:MONTPELIER	24	1.7	0.0	0.6	0.40	0.01	0.10
WA:OLYMPIA	31	1.3	0.0	0.2	0.81	0.01	0.13
WA:SPOKANE	31	2.2	0.0	0.8	1.65	0.01	0.29
WI:MADISON	29	3.2	0.1	1.5	0.71	0.01	0.25
WV:CHARLESTON	20	1.4	0.1	0.4	0.45	0.00	0.11
WY:CHEYENNE	24	3.5	0.4	1.6	1.13	0.03	0.55

MINIMUM DETECTABLE LIMIT FOR FIELD ESTIMATES - .1 pCi/m^3
MINIMUM DETECTABLE LIMIT FOR LAB MEASUREMENT - .01 pCi/m^3

TABLE 4

AIRBORNE PARTICULATES
GROSS BETA CONCENTRATION
JUNE 1986

LOCATION	# SAM	5-HR FIELD ESTIMATE			EERF LAB MEASUREMENT		
		MAX	MIN	AVG	MAX	MIN	AVG
		(pCi/m^3)			(pCi/m^3)		
AL:ASHFORD	4	0.0	0.0	0.0	0.04	0.01	0.02
AL:MONTGOMERY	9	1.2	0.6	0.9	0.64	0.02	0.14
AR:LITTLE ROCK	13	1.0	0.1	0.5	0.13	0.01	0.03
AZ:PHOENIX	10	2.2	0.2	1.2	0.39	0.01	0.12
CA:BERKELEY	12	0.0	0.0	0.0	0.06	0.00	0.02
CA:LOS ANGELES	11	0.4	0.1	0.2	0.13	0.01	0.04
CO:DENVER	12	1.7	0.4	0.9	0.19	0.01	0.03
CT:HARTFORD	8	0.3	0.1	0.1	0.17	0.01	0.05
DE:WILMINGTON	10	0.6	0.1	0.3	0.18	0.01	0.05
FL:JACKSONVILLE	8	0.1	0.0	0.1	0.06	0.01	0.02
FL:MIAMI	9	0.0	0.0	0.0	0.03	0.01	0.01
GA:ATLANTA	6	0.9	0.1	0.3	0.14	0.01	0.04
HI:HONOLULU	12	0.1	0.1	0.1	0.20	0.00	0.04
IA:IOWA CITY	11	1.0	0.2	0.5	0.28	0.01	0.06
ID:BOISE	11	0.6	0.1	0.3	0.08	0.01	0.02
ID:IDAHO FALLS	10	2.9	2.4	2.7	0.84	0.01	0.16
IL:CHICAGO	9	1.0	0.1	0.4	0.18	0.01	0.04
IN:INDIANAPOLIS	12	1.4	0.2	0.7	0.32	0.00	0.06
KS:TOPEKA	10	5.3	0.3	1.9	0.15	0.01	0.04
KY:FRANKFORT	6	1.6	0.2	0.7	0.05	0.01	0.02
LA:NEW ORLEANS	8	0.2	0.1	0.1	0.09	0.01	0.03
MA:LAWRENCE	8	0.3	0.1	0.2	0.20	0.01	0.06
ME:AUGUSTA	8	0.4	0.0	0.2	0.16	0.00	0.05
MI:LANSING	12	0.9	0.1	0.4	0.39	0.01	0.08
MN:MINNEAPOLIS	13	1.5	0.0	0.5	0.25	0.01	0.07
MO:JEFFERSON CITY	10	4.7	0.5	1.9	0.33	0.01	0.09
MS:JACKSON	12	2.0	0.1	0.8	0.33	0.01	0.09
MT:HELENA	5	10.7	3.1	5.8	0.43	0.01	0.25
NC:CHARLOTTE	8	0.4	0.1	0.2	0.10	0.01	0.03
NC:WILMINGTON	8	0.1	0.0	0.1	0.07	0.01	0.02
ND:BISMARCK	8	0.9	0.4	0.7	0.06	0.01	0.03
NE:LINCOLN	11	8.6	0.3	2.9	0.13	0.01	0.03
NH:CONCORD	12	0.6	0.1	0.3	0.22	0.00	0.07
NJ:TRENTON	9	1.0	0.2	0.5	0.15	0.01	0.03
NM:SANTA FE	8	0.4	0.1	0.3	0.02	0.00	0.01
NV:LAS VEGAS	9	0.2	0.1	0.2	0.05	0.01	0.03
NY:ALBANY	4	0.1	0.0	0.1	0.11	0.01	0.05
NY:NEW YORK CITY	9	0.6	0.1	0.3	0.16	0.01	0.04

TABLE 4 (CONTINUED)

AIRBORNE PARTICULATES
GROSS BETA CONCENTRATION
JUNE 1986

LOCATION	# SAM	5-HR FIELD ESTIMATE			EERF LAB MEASUREMENT		
		MAX	MIN	AVG	MAX	MIN	AVG
		(pCi/m^3)			(pCi/m^3)		
NY:NIAGARA FALLS	9	0.5	0.1	0.3	0.32	0.01	0.08
NY:SYRACUSE	8	0.2	0.1	0.2	0.16	0.00	0.04
NY:YAPHANK	8	0.2	0.0	0.1	0.12	0.01	0.04
OH:COLUMBUS	15	1.7	0.2	0.8	0.59	0.01	0.15
OH:PAINESVILLE	8	0.3	0.1	0.2	0.14	0.01	0.04
OH:TOLEDO	9	1.2	0.1	0.4	0.23	0.01	0.05
OK:OKLAHOMA CITY	11	1.5	0.1	0.6	0.17	0.01	0.04
OR:PORTLAND	8	0.1	0.0	0.0	0.04	0.00	0.01
PA:GOLDSBORO	9	1.0	0.0	0.4	0.35	0.01	0.07
PA:HARRISBURG	9	0.5	0.1	0.3	0.17	0.01	0.04
PA:MIDDLETOWN	2	0.5	0.0	0.3	0.01	0.01	0.01
PA:PITTSBURGH	8	0.2	0.0	0.1	0.11	0.01	0.03
PA:THREE MILE ISL	7	1.0	0.4	0.7	0.19	0.01	0.06
RI:PROVIDENCE	8	0.3	0.0	0.1	0.15	0.01	0.05
SC:BARNWELL	2	0.0	0.0	0.0	0.02	0.02	0.02
SC:CHARLESTON	1	0.2	0.2	0.2	0.02	0.02	0.02
SC:COLUMBIA	9	0.5	0.1	0.3	0.07	0.01	0.03
SD:PIERRE	9	1.1	0.1	0.4	0.11	0.01	0.03
TN:KNOXVILLE	10	2.1	0.2	0.7	0.05	0.01	0.02
TN:NASHVILLE	9	0.7	0.1	0.3	0.06	0.01	0.02
TX:AUSTIN	11	0.3	0.1	0.2	0.06	0.01	0.02
TX:EL PASO	15	1.5	0.2	0.7	0.33	0.00	0.06
UT:SALT LAKE CITY	3	0.3	0.2	0.3	0.02	0.01	0.02
VA:LYNCHBURG	9	3.5	0.6	1.6	0.61	0.01	0.19
VA:VIRGINIA BEACH	4	0.1	0.0	0.1	0.05	0.01	0.03
VT:MONTPELIER	1	0.0	0.0	0.0	0.06	0.06	0.06
WA:OLYMPIA	9	0.2	0.0	0.1	0.07	0.00	0.02
WA:SPOKANE	10	1.8	0.2	0.5	0.16	0.01	0.04
WI:MADISON	12	1.8	0.2	0.7	0.26	0.01	0.06
WV:CHARLESTON	8	0.9	0.1	0.3	0.06	0.01	0.02
WY:CHEYENNE	9	10.0	0.1	2.0	0.05	0.01	0.02

MINIMUM DETECTABLE LIMIT FOR FIELD ESTIMATES - .1 pCi/m3
MINIMUM DETECTABLE LIMIT FOR LAB MEASUREMENT - .01 pCi/m3

TABLE 4.1

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
AK:ANCHORAGE	5/10/86			
		RU-103	1.70E-02	19.0
		CS-137	1.50E-02	25.0
		I-131	1.80E-01	6.0
		CS-134	9.40E-02	30.0
AL:ASHFORD	5/12/86			
		RU-103	3.00E-02	22.0
		RU-106	1.00E-01	31.0
		CS-134	7.00E-02	13.0
		CS-136	1.00E-02	50.0
		CS-137	1.50E-01	10.0
		LA-140	2.00E-02	52.0
		I-131	2.50E-01	6.0
AL:ASHFORD	5/13/86			
		RU-103	5.00E-02	16.0
		CS-134	8.00E-02	13.0
		CS-136	1.00E-02	46.0
		CS-137	1.70E-01	10.0
		BA-140	2.00E-02	88.0
		LA-140	2.00E-02	54.0
		I-131	1.70E-01	8.0
AL:ASHFORD	5/14/86			
		RU-103	6.00E-02	6.0
		RU-106	2.40E-02	65.0
		CS-134	6.90E-02	5.0
		CS-136	1.00E-02	22.0
		CS-137	1.40E-01	4.0
		BA-140	1.40E-02	38.0
		LA-140	1.30E-02	23.0
		I-132	1.10E-02	24.0
		I-131	1.00E-01	4.0
AL:MONTGOMERY	5/12/86			
		RU-103	2.70E-02	28.0
		I-131	7.40E-02	17.0
		CS-134	3.60E-02	24.0
		CS-137	6.20E-02	20.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
AL:MONTGOMERY	5/13/86			
		RU-103	5.00E-02	5.0
		I-131	1.60E-01	5.0
		CS-134	6.80E-02	7.0
		CS-136	1.20E-02	32.0
		CS-137	1.30E-01	6.0
		BA-140	1.40E-02	36.0
		LA-140	1.40E-02	36.0
AL:MONTGOMERY	5/15/86			
		RU-103	4.10E-02	33.0
		I-131	6.00E-02	19.0
		CS-134	5.70E-02	48.0
		CS-137	1.40E-01	23.0
AL:MONTGOMERY	5/16/86			
		RU-103	3.00E-02	10.0
		I-131	2.40E-02	13.0
		I-132	5.00E-03	36.0
		CS-134	3.90E-02	8.0
		CS-136	5.00E-03	38.0
		CS-137	8.70E-02	6.0
		BA-140	1.10E-02	74.0
		LA-140	9.00E-03	36.0
AL:MONTGOMERY	5/21/86			
		RU-103	3.80E-02	7.0
		RU-106	1.50E-02	68.0
		CS-134	1.20E-02	17.0
		CS-137	2.60E-02	13.0
		LA-140	7.00E-03	41.0
		I-131	3.00E-02	11.0
AL:MONTGOMERY	5/23/86			
		RU-103	1.20E-01	11.0
		RU-106	1.30E-01	55.0
		I-131	4.20E-02	32.0
		CS-134	3.90E-02	21.0
		CS-137	7.90E-02	17.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
AZ:PHOENIX	5/ 8/86			
		CS-134	1.50E-02	25.0
		CS-137	2.80E-02	19.0
		I-131	9.10E-02	7.0
AZ:PHOENIX	5/ 9/86			
		RU-103	1.38E-02	15.0
		RU-106	1.16E-01	87.0
		I-131	6.45E-02	23.0
		CS-134	1.07E-02	23.0
		CS-137	1.78E-02	17.0
		BA-140	8.27E-03	51.0
AZ:PHOENIX	5/12/86			
		RU-103	4.30E-01	3.0
		RU-106	1.60E-01	23.0
		CS-134	1.20E-01	8.0
		CS-136	1.80E-02	33.0
		CS-137	2.50E-02	5.0
		BA-140	1.20E-01	14.0
		LA-140	1.20E-01	11.0
		I-131	1.60E+00	1.0
AZ:PHOENIX	5/13/86			
		RU-103	4.10E-01	3.0
		RU-106	1.20E-01	25.0
		I-132	6.60E-02	10.0
		CS-134	1.20E-01	5.0
		CS-136	2.00E-02	22.0
		CS-137	2.40E-01	4.0
		BA-140	1.00E-01	19.0
		LA-140	1.10E-01	10.0
		I-131	1.40E+00	1.0
AZ:PHOENIX	5/14/86			
		RU-103	2.60E-01	4.0
		RU-106	1.00E-01	36.0
		I-132	3.20E-02	21.0
		CS-134	8.20E-02	9.0
		CS-136	1.40E-02	35.0
		CS-137	1.70E-01	6.0
		BA-140	6.20E-02	20.0
		LA-140	5.20E-02	18.0
		I-131	8.10E-01	1.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
AZ:PHOENIX	5/15/86			
		RU-103	1.90E-01	8.0
		CS-134	7.10E-02	15.0
		CS-137	1.60E-01	11.0
		BA-140	3.20E-02	78.0
		LA-140	4.30E-02	30.0
		I-131	4.60E-01	5.0
AZ:PHOENIX	5/15/86			
		RU-103	1.30E-01	3.0
		RU-106	3.40E-02	66.0
		CS-134	5.10E-02	6.0
		CS-136	6.00E-03	27.0
		CS-137	1.10E-01	4.0
		BA-140	1.90E-02	60.0
		LA-140	1.80E-02	18.0
		I-131	3.10E-01	2.0
AZ:PHOENIX	5/22/86			
		RU-103	7.10E-02	6.0
		RU-106	1.80E-02	64.0
		CS-134	2.40E-02	11.0
		CS-136	2.00E-03	95.0
		CS-137	5.80E-02	8.0
		BA-140	9.00E-03	76.0
		I-131	1.10E-01	4.0
AZ:PHOENIX	5/23/86			
		RU-103	4.50E-02	7.0
		CS-134	1.50E-02	14.0
		CS-137	3.50E-02	11.0
		BA-140	1.10E-02	55.0
		I-131	8.20E-02	5.0
AZ:PHOENIX	5/28/86			
		I-131	3.60E-02	33.0
		RU-103	2.40E-02	52.0
		CS-137	1.90E-02	58.0
AZ:PHOENIX	5/29/86			
		I-131	1.70E-02	22.0
		RU-103	2.00E-02	12.0
		CS-134	4.70E-02	56.0
		CS-137	1.50E-02	21.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
CA:BERKELEY	5/11/86			
		RU-103	2.60E-01	8.0
		CS-134	2.90E-01	8.0
		CS-136	5.00E-02	38.0
		CS-137	5.60E-01	6.0
		BA-140	7.00E-02	39.0
		LA-140	8.00E-02	24.0
		I-131	8.40E-01	4.0
CA:BERKELEY	5/13/86			
		RU-103	3.10E-01	6.0
		RU-106	9.60E-02	70.0
		CS-134	1.40E-01	12.0
		CS-136	2.30E-02	38.0
		CS-137	3.00E-01	8.0
		BA-140	2.40E-02	53.0
		LA-140	2.80E-02	41.0
		I-131	4.20E-01	6.0
CA:BERKELEY	5/18/86			
		CS-134	1.30E-01	17.0
		CS-136	1.80E-02	59.0
		CS-137	2.70E-01	11.0
		LA-140	4.30E-02	46.0
		I-131	2.10E-01	10.0
CA:BERKELEY	5/19/86			
		RU-103	4.10E-01	5.0
		RU-106	1.40E-01	53.0
		CS-134	1.50E-01	11.0
		CS-136	1.40E-02	43.0
		CS-137	3.30E-01	7.0
		BA-140	5.20E-02	58.0
		LA-140	3.00E-02	41.0
		I-131	1.50E-01	10.0
CA:LOS ANGELES	5/12/86			
		RU-103	2.50E-01	7.0
		I-132	6.00E-02	19.0
		CS-134	1.70E-01	8.0
		CS-136	3.60E-02	26.0
		CS-137	3.50E-01	6.0
		BA-140	7.20E-02	40.0
		LA-140	6.20E-02	20.0
		I-131	2.80E-01	6.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
CA:LOS ANGELES	5/13/86			
		RU-103	2.70E-01	2.0
		RU-106	8.40E-02	27.0
		CS-134	1.80E-01	3.0
		CS-136	2.50E-02	20.0
		CS-137	3.50E-01	2.0
		BA-140	5.50E-02	17.0
		LA-140	5.20E-02	10.0
		I-131	1.80E-01	3.0
CA:LOS ANGELES	5/14/86			
		RU-103	3.00E-01	6.0
		RU-106	1.10E-01	53.0
		CS-134	1.50E-01	9.0
		CS-136	3.30E-02	28.0
		CS-137	3.20E-01	6.0
		BA-140	4.50E-02	53.0
		LA-140	4.90E-02	24.0
		I-131	1.80E-01	8.0
CA:LOS ANGELES	5/15/86			
		RU-103	3.50E-01	6.0
		RU-106	1.10E-01	88.0
		CS-134	1.70E-01	9.0
		CS-136	2.20E-02	34.0
		CS-137	3.50E-01	7.0
		BA-140	5.10E-02	49.0
		LA-140	5.10E-02	26.0
		I-131	1.60E-01	10.0
CA:LOS ANGELES	5/19/86			
		RU-103	1.70E-01	3.0
		RU-106	5.50E-02	23.0
		I-132	6.90E-03	28.0
		CS-134	6.00E-02	7.0
		CS-136	7.00E-03	39.0
		CS-137	1.40E-01	4.0
		BA-140	1.80E-02	30.0
		LA-140	1.70E-02	17.0
		I-131	4.70E-02	8.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	$\pm 2s$ (in percent)
CA:LOS ANGELES	5/21/86			
		RU-103	1.50E-01	4.0
		RU-106	5.40E-02	38.0
		CS-134	6.10E-02	7.0
		CS-136	7.60E-02	31.0
		CS-137	1.20E-01	5.0
		LA-140	1.50E-02	28.0
		I-131	2.10E-02	18.0
CO:DENVER	5/ 6/86			
		RU-103	2.40E-01	7.0
		RU-106	8.80E-02	58.0
		I-132	3.30E-02	33.0
		CS-134	8.80E-02	13.0
		CS-136	2.10E-02	42.0
		CS-137	1.80E-01	11.0
		BA-140	4.70E-02	52.0
		LA-140	4.10E-02	32.0
		I-131	2.70E-01	7.0
CO:DENVER	5/14/86			
		RU-103	1.40E-01	4.0
		RU-106	4.90E-02	38.0
		CS-134	5.40E-02	7.0
		CS-136	8.00E-03	31.0
		CS-137	1.10E-01	5.0
		BA-140	2.10E-02	42.0
		LA-140	2.50E-02	18.0
		I-131	2.00E-01	3.0
CO:DENVER	5/15/86			
		RU-103	1.80E-01	8.0
		CS-134	6.40E-02	15.0
		CS-136	9.90E-03	49.0
		CS-137	1.40E-01	11.0
		BA-140	2.90E-02	85.0
		LA-140	3.20E-02	33.0
		I-131	2.10E-01	9.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
CO:DENVER	5/19/86			
		RU-103	1.70E-01	3.0
		RU-106	5.30E-02	32.0
		CS-134	5.20E-02	7.0
		CS-136	8.00E-03	43.0
		CS-137	1.20E-01	4.0
		BA-140	3.10E-02	23.0
		LA-140	2.80E-02	14.0
		I-131	1.30E-01	3.0
CO:DENVER	5/22/86			
		RU-103	2.20E-02	35.0
		CS-134	8.00E-03	66.0
		CS-137	1.90E-02	39.0
		I-131	4.30E-02	22.0
FL:JACKSONVILLE	5/11/86			
		RU-103	4.90E-02	7.0
		I-132	2.50E-02	12.0
		CS-134	1.10E-01	4.0
		CS-136	1.90E-02	15.0
		CS-137	2.30E-01	3.0
		BA-140	2.40E-02	27.0
		LA-140	2.20E-02	13.0
		I-131	5.50E-01	1.0
IA:IOWA CITY	5/15/86			
		RU-103	2.20E-01	8.0
		RU-106	7.90E-02	85.0
		I-132	2.80E-02	35.0
		CS-134	8.80E-02	14.0
		CS-136	1.50E-02	50.0
		CS-137	1.90E-01	10.0
		BA-140	4.20E-02	46.0
		LA-140	5.20E-02	30.0
		I-131	1.80E-01	5.0
IA:IOWA CITY	5/22/86			
		RU-103	3.50E-01	3.0
		RU-106	1.30E-01	23.0
		CS-134	6.70E-02	7.0
		CS-136	7.00E-03	31.0
		CS-137	1.40E-01	5.0
		BA-140	2.10E-02	45.0
		LA-140	1.90E-02	25.0
		I-131	1.10E-01	11.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
IA:IOWA CITY	5/23/86			
		RU-103	1.50E-01	8.0
		CS-134	2.60E-02	26.0
		CS-137	7.20E-02	14.0
		I-131	3.70E-02	21.0
ID:BOISE	5/10/86			
		RU-106	9.70E-02	34.0
		CS-134	1.20E-01	12.0
		CS-136	2.00E-02	43.0
		CS-137	2.50E-01	9.0
		BA-140	5.70E-02	67.0
		LA-140	7.30E-02	23.0
		I-131	7.90E-01	4.0
ID:BOISE	5/11/86			
		RU-103	4.70E-01	5.0
		RU-106	1.90E-01	45.0
		CS-134	4.50E-01	5.0
		CS-136	7.10E-02	5.0
		CS-137	9.10E-01	4.0
		BA-140	2.10E-01	20.0
		LA-140	1.60E-01	14.0
		I-131	1.60E+00	3.0
ID:BOISE	5/16/86			
		RU-103	2.10E-01	3.0
		RU-106	6.60E-02	38.0
		CS-134	8.50E-02	5.0
		CS-136	1.30E-02	26.0
		CS-137	1.80E-01	4.0
		BA-140	3.00E-02	23.0
		LA-140	3.40E-02	14.0
		I-131	3.80E-01	2.0
ID:BOISE	5/17/86			
		RU-103	1.80E-01	9.0
		CS-134	8.20E-02	15.0
		CS-137	1.80E-01	10.0
		LA-140	3.50E-02	34.0
		I-131	4.80E-01	6.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
ID:BOISE	5/18/86			
		RU-103	2.70E-01	9.0
		RU-106	1.30E-01	63.0
		CS-134	1.10E-01	15.0
		CS-136	1.90E-02	57.0
		CS-137	2.20E-01	11.0
		LA-140	4.40E-02	41.0
		I-131	4.20E-01	11.0
ID:BOISE	5/19/86			
		RU-103	1.90E-01	15.0
		CS-134	6.90E-02	28.0
		CS-137	1.30E-01	20.0
		LA-140	3.30E-02	62.0
		I-131	1.90E-01	12.0
ID:BOISE	5/20/86			
		RU-103	1.00E-01	13.0
		RU-106	5.20E-02	88.0
		CS-134	3.80E-02	24.0
		CS-137	8.30E-02	18.0
		BA-140	1.40E-02	64.0
		LA-140	1.40E-02	69.0
		I-131	1.00E-01	12.0
ID:IDAHO FALLS	5/12/86			
		RU-103	2.90E-01	7.0
		RU-106	9.30E-02	56.0
		CS-134	2.00E-01	10.0
		CS-136	4.00E-02	32.0
		CS-137	4.10E-01	7.0
		BA-140	6.50E-02	52.0
		LA-140	5.00E-02	32.0
		I-131	7.50E-01	4.0
ID:IDAHO FALLS	5/13/86			
		RU-103	1.60E-01	7.0
		CS-134	7.60E-02	12.0
		CS-136	1.50E-02	43.0
		CS-137	1.70E-01	8.0
		BA-140	2.70E-02	85.0
		LA-140	2.30E-02	35.0
		I-131	4.00E-01	5.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
ID:IDAHO FALLS	5/14/86			
		RU-103	1.30E-01	4.0
		RU-106	4.60E-02	38.0
		CS-134	5.80E-02	7.0
		CS-136	8.70E-03	26.0
		CS-137	1.10E-01	5.0
		BA-140	2.30E-02	25.0
		LA-140	2.00E-02	25.0
		I-131	3.10E-01	3.0
ID:IDAHO FALLS	5/16/86			
		RU-103	3.00E-01	3.0
		RU-106	8.70E-02	31.0
		CS-134	1.10E-01	5.0
		CS-136	1.60E-02	19.0
		CS-137	2.30E-01	4.0
		BA-140	4.40E-02	48.0
		LA-140	5.00E-02	14.0
		I-131	7.00E-01	2.0
ID:IDAHO FALLS	5/17/86			
		RU-103	2.70E-01	6.0
		RU-106	7.40E-02	49.0
		CS-134	9.60E-02	7.0
		CS-136	1.00E-02	49.0
		CS-137	2.20E-01	7.0
		BA-140	3.40E-02	51.0
		LA-140	3.80E-02	26.0
		I-131	5.70E-01	4.0
ID:IDAHO FALLS	5/18/86			
		RU-103	3.30E-01	6.0
		CS-134	1.10E-01	11.0
		CS-136	1.30E-02	60.0
		CS-137	2.40E-01	8.0
		LA-140	4.20E-02	25.0
		I-131	6.10E-01	4.0
ID:IDAHO FALLS	5/19/86			
		RU-103	1.80E-01	11.0
		CS-134	6.70E-02	17.0
		CS-137	1.30E-01	14.0
		LA-140	2.60E-02	54.0
		I-131	2.60E-01	14.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
ID:IDAHO FALLS	5/19/86			
		RU-103	1.60E-01	5.0
		RU-106	5.40E-02	58.0
		CS-134	5.50E-02	11.0
		CS-136	7.90E-02	58.0
		CS-137	1.20E-01	6.0
		BA-140	2.40E-02	39.0
		LA-140	2.90E-02	24.0
		I-131	2.50E-01	3.0
ID:IDAHO FALLS	5/21/86			
		RU-103	1.10E-01	4.0
		RU-106	3.20E-02	51.0
		CS-134	3.30E-02	8.0
		CS-136	4.00E-03	41.0
		CS-137	7.30E-02	6.0
		BA-140	1.40E-02	45.0
		LA-140	1.50E-02	23.0
		I-131	1.10E-01	3.0
ID:IDAHO FALLS	5/22/86			
		RU-103	8.10E-02	3.0
		RU-106	2.30E-02	57.0
		CS-134	2.00E-02	11.0
		CS-136	2.00E-03	69.0
		CS-137	4.80E-02	7.0
		BA-140	1.00E-02	55.0
		LA-140	1.10E-02	25.0
		I-131	1.50E-01	3.0
ID:IDAHO FALLS	5/23/86			
		RU-103	1.10E-01	10.0
		CS-134	2.90E-02	22.0
		CS-137	6.30E-02	16.0
		LA-140	9.00E-03	74.0
		I-131	1.20E-01	10.0
IL:CHICAGO	5/20/86			
		RU-103	2.40E-01	3.0
		RU-106	8.00E-02	34.0
		CS-134	1.10E-01	4.0
		CS-136	1.20E-02	21.0
		CS-137	2.40E-01	3.0
		BA-140	4.30E-02	23.0
		LA-140	4.30E-02	13.0
		I-131	2.70E-01	2.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
IN:INDIANAPOLIS	5/13/86			
		RU-103	6.20E-02	22.0
		CS-134	7.40E-02	21.0
		CS-137	1.50E-01	15.0
		I-131	1.50E-01	11.0
IN:INDIANAPOLIS	5/23/86			
		RU-103	3.20E-01	2.0
		RU-106	1.00E-01	16.0
		CS-134	4.90E-02	6.0
		CS-136	4.00E-03	45.0
		CS-137	1.30E-01	3.0
		BA-140	1.50E-02	38.0
		LA-140	1.60E-02	15.0
		I-131	8.90E-02	4.0
KS:TOPEKA	5/20/86			
		RU-103	2.50E-01	2.0
		RU-106	6.70E-02	22.0
		CS-134	9.70E-02	5.0
		CS-136	1.00E-02	25.0
		CS-137	2.20E-01	3.0
		BA-140	3.70E-02	17.0
		LA-140	3.50E-02	11.0
		I-131	2.50E-01	2.0
KS:TOPEKA	5/21/86			
		RU-103	2.80E-01	9.0
		RU-106	1.20E-01	75.0
		CS-134	1.10E-01	14.0
		CS-136	2.00E-02	56.0
		CS-137	2.30E-01	11.0
		BA-140	3.40E-02	47.0
		LA-140	3.40E-02	47.0
		I-131	2.00E-01	13.0
KS:TOPEKA	5/23/86			
		RU-103	9.00E-02	4.0
		RU-106	2.70E-02	42.0
		CS-134	2.70E-02	13.0
		CS-136	2.20E-02	60.0
		CS-137	6.20E-02	6.0
		BA-140	1.00E-02	39.0
		LA-140	1.10E-02	25.0
		I-131	3.80E-02	10.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	$\pm 2s$ (in percent)
LA:NEW ORLEANS	5/30/86			
		I-131	4.00E-03	77.0
		RU-103	4.40E-02	10.0
		CS-134	1.00E-02	60.0
		CS-137	2.40E-02	17.0
		LA-140	9.00E-03	46.0
ME:AUGUSTA	5/30/86			
		RU-103	3.20E-02	4.0
		RU-106	1.30E-02	39.0
		CS-134	1.10E-02	8.0
		CS-137	2.50E-02	6.0
		BA-140	3.00E-03	97.0
		LA-140	2.00E-03	32.0
		I-131	5.00E-03	15.0
ME:AUGUSTA	5/30/86			
		RU-103	3.70E-01	1.0
		RU-106	1.10E-01	17.0
		CS-134	5.50E-02	6.0
		CS-136	1.00E-03	25.0
		CS-137	1.40E-01	3.0
		BA-140	1.60E-02	38.0
		LA-140	1.50E-02	17.0
		I-131	8.70E-02	4.0
MN:MINNEAPOLIS	5/15/86			
		RU-103	2.80E-01	2.0
		RU-106	8.90E-02	22.0
		I-132	2.60E-02	13.0
		CS-134	9.80E-02	4.0
		CS-136	1.20E-02	27.0
		CS-137	2.20E-01	3.0
		BA-140	6.40E-02	14.0
		LA-140	6.40E-02	8.0
		I-131	2.00E-01	3.0
MN:MINNEAPOLIS	5/16/86			
		RU-103	2.10E-01	3.0
		RU-106	7.10E-02	35.0
		I-132	1.30E-02	24.0
		CS-134	9.40E-02	5.0
		CS-136	1.10E-02	29.0
		CS-137	1.90E-01	4.0
		BA-140	3.80E-02	25.0
		LA-140	3.90E-02	13.0
		I-131	1.40E-01	4.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
MN:MINNEAPOLIS	5/22/86			
		RU-103	3.30E-01	3.0
		RU-106	1.10E-01	30.0
		CS-134	7.00E-02	7.0
		CS-136	7.00E-03	34.0
		CS-137	1.60E-01	5.0
		LA-140	2.10E-02	25.0
		I-131	2.00E-01	5.0
MO:JEFFERSON CIT	5/21/86			
		RU-103	1.10E-01	3.0
		RU-106	3.50E-02	36.0
		CS-134	3.80E-02	7.0
		CS-136	3.00E-03	68.0
		CS-137	8.50E-02	5.0
		BA-140	1.60E-02	32.0
		LA-140	1.10E-02	24.0
		I-131	8.40E-02	4.0
MO:JEFFERSON CIT	5/30/86			
		I-131	5.00E-03	91.0
		RU-103	1.40E-02	34.0
		CS-137	5.00E-03	96.0
MS:JACKSON	5/21/86			
		RU-103	4.30E-02	53.0
		CS-134	1.80E-02	56.0
		CS-137	3.20E-02	37.0
		I-131	3.30E-02	24.0
MT:HELENA	5/10/86			
		RU-103	2.70E-01	6.0
		RU-106	6.60E-02	49.0
		I-132	6.50E-02	15.0
		CS-134	8.20E-02	11.0
		CS-136	1.40E-02	34.0
		CS-137	1.80E-01	8.0
		BA-140	3.60E-02	34.0
		LA-140	6.00E-02	17.0
		I-131	6.50E-01	3.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
MT:HELENA	5/12/86			
		RU-103	1.10E-01	4.0
		RU-106	4.20E-02	35.0
		CS-134	8.20E-02	5.0
		CS-136	1.10E-02	25.0
		CS-137	1.70E-01	4.0
		BA-140	2.40E-02	15.0
		LA-140	2.40E-02	15.0
		I-131	4.10E-01	2.0
MT:HELENA	5/21/86			
		RU-103	5.50E-02	6.0
		RU-106	2.50E-02	49.0
		CS-134	1.80E-02	10.0
		CS-136	1.00E-03	69.0
		CS-137	4.10E-02	8.0
		BA-140	7.00E-03	48.0
		LA-140	7.00E-03	30.0
		I-131	6.10E-02	5.0
NC:CHARLOTTE	5/11/86			
		RU-103	2.40E-02	22.0
		CS-134	7.40E-02	9.0
		CS-136	1.00E-02	37.0
		CS-137	1.50E-01	6.0
		BA-140	1.40E-02	78.0
		LA-140	1.60E-02	36.0
		I-131	1.60E-01	4.0
NC:CHARLOTTE	5/16/86			
		RU-103	2.90E-02	8.0
		CS-134	2.80E-02	9.0
		CS-136	4.00E-03	37.0
		CS-137	5.60E-02	6.0
		LA-140	7.00E-03	39.0
		I-131	2.60E-02	12.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	$\pm 2s$ (in percent)
ND:BISMARCK	5/13/86			
		RU-103	2.30E-01	2.0
		RU-106	6.90E-02	28.0
		CS-134	1.20E-01	4.0
		CS-136	1.80E-02	17.0
		CS-137	2.60E-01	3.0
		BA-140	6.00E-02	16.0
		LA-140	5.20E-02	9.0
		I-131	4.30E-01	2.0
ND:BISMARCK	5/18/86			
		RU-103	1.80E-01	3.0
		RU-106	4.70E-02	35.0
		I-132	1.30E-02	20.0
		CS-134	1.00E-01	4.0
		CS-136	1.40E-02	20.0
		CS-137	2.20E-01	3.0
		BA-140	3.60E-02	23.0
		LA-140	3.30E-02	12.0
		I-131	2.80E-01	2.0
ND:BISMARCK	5/21/86			
		RU-103	1.60E-01	5.0
		RU-106	5.10E-02	70.0
		I-131	1.10E-01	4.0
		CS-134	6.40E-02	10.0
		CS-136	8.00E-03	58.0
		CS-137	1.40E-01	6.0
		BA-140	2.00E-02	44.0
		LA-140	1.60E-02	36.0
		I-131	1.40E-01	4.0
ND:BISMARCK	5/21/86			
		RU-103	1.30E-01	14.0
		CS-134	7.10E-02	20.0
		CS-137	1.30E-01	17.0
		BA-140	4.40E-02	94.0
		LA-140	3.90E-02	45.0
		I-131	2.10E-01	27.0
NE:LINCOLN	5/13/86			
		RU-103	2.80E-01	6.0
		RU-106	9.20E-02	62.0
		CS-134	1.10E-01	11.0
		CS-136	1.60E-02	38.0
		CS-137	2.30E-01	8.0
		BA-140	7.60E-02	37.0
		LA-140	7.40E-02	22.0
		I-131	3.20E-01	6.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
NE:LINCOLN	5/15/86			
		RU-103	1.40E-01	9.0
		I-132	1.40E-02	46.0
		CS-134	5.00E-02	18.0
		CS-137	1.30E-01	11.0
		BA-140	2.30E-02	76.0
		LA-140	2.60E-02	35.0
		I-131	1.20E-01	10.0
NE:LINCOLN	5/15/86			
		RU-103	2.30E-01	4.0
		RU-106	8.30E-02	39.0
		CS-134	9.00E-02	9.0
		CS-136	8.00E-03	53.0
		CS-137	1.90E-01	5.0
		BA-140	3.20E-02	32.0
		LA-140	2.50E-02	27.0
		I-131	1.80E-01	4.0
NE:LINCOLN	5/21/86			
		I-131	1.50E-02	47.0
		RU-103	1.90E-02	38.0
NJ:TRENTON	5/27/86			
		I-131	1.10E-02	11.0
		RU-103	5.50E-02	4.0
		RU-106	2.30E-02	30.0
		CS-134	1.50E-02	12.0
		CS-137	3.20E-02	7.0
		LA-140	3.00E-03	48.0
NV:LAS VEGAS	5/13/86			
		RU-103	3.40E-01	2.0
		RU-106	9.30E-02	23.0
		CS-134	1.00E-01	4.0
		CS-136	1.00E-02	42.0
		CS-137	2.30E-01	3.0
		BA-140	5.50E-02	17.0
		LA-140	6.20E-02	8.0
		I-131	8.40E-01	1.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
NV:LAS VEGAS	5/15/86			
		RU-103	1.90E-01	3.0
		CS-134	7.50E-02	5.0
		CS-136	1.10E-02	19.0
		CS-137	1.60E-01	3.0
		I-132	1.90E-02	15.0
		BA-140	3.10E-02	32.0
		LA-140	3.20E-02	12.0
		I-131	3.20E-01	2.0
NV:LAS VEGAS	5/16/86			
		RU-103	1.40E-01	3.0
		RU-106	3.50E-02	43.0
		CS-134	5.00E-02	7.0
		CS-136	1.10E-02	21.0
		CS-137	1.10E-01	4.0
		BA-140	2.70E-02	25.0
		LA-140	2.10E-02	15.0
		I-131	3.30E-01	2.0
NV:LAS VEGAS	5/16/86			
		RU-103	2.60E-01	4.0
		RU-106	8.10E-02	32.0
		CS-134	8.70E-02	8.0
		CS-136	1.10E-02	40.0
		CS-137	1.90E-01	5.0
		BA-140	4.60E-02	25.0
		LA-140	4.70E-02	15.0
		I-131	4.80E-01	3.0
NV:LAS VEGAS	5/27/86			
		I-131	1.40E-01	5.0
		RU-103	1.30E-01	5.0
		RU-106	4.60E-02	48.0
		CS-134	3.00E-02	13.0
		CS-136	5.00E-03	45.0
		CS-137	7.30E-02	9.0
		BA-140	1.30E-02	53.0
		LA-140	1.20E-02	30.0
NY:YAPHANK	5/10/86			
		CS-134	7.92E-02	17.0
		CS-136	1.18E-02	57.0
		CS-137	1.41E-01	13.0
		LA-140	1.86E-02	56.0
		I-131	2.92E-01	17.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
OH:COLUMBUS	5/13/86			
		RU-103	1.00E-01	3.0
		RU-106	3.30E-02	48.0
		I-132	2.40E-02	12.0
		CS-134	1.30E-01	3.0
		CS-136	1.80E-01	13.0
		CS-137	2.60E-01	2.0
		BA-140	2.80E-02	27.0
		I-131	2.40E-01	2.0
OH:COLUMBUS	5/15/86			
		RU-103	2.60E-02	24.0
		CS-134	1.00E-02	40.0
		CS-137	6.30E-02	27.0
		I-131	2.70E-02	26.0
OH:COLUMBUS	5/23/86			
		RU-103	4.00E-01	3.0
		RU-106	1.40E-01	26.0
		CS-134	7.90E-02	10.0
		CS-136	6.00E-03	59.0
		CS-137	1.60E-01	6.0
		LA-140	1.90E-02	33.0
		I-131	1.30E-01	5.0
OH:COLUMBUS	5/23/86			
		RU-103	1.30E-01	12.0
		CS-134	4.50E-02	22.0
		CS-136	8.00E-03	77.0
		CS-137	8.60E-02	18.0
		BA-140	2.60E-02	94.0
		LA-140	2.20E-02	66.0
		I-131	8.80E-02	23.0
OH:TOLEDO	5/18/86			
		RU-103	3.30E-02	8.0
		CS-134	1.90E-02	11.0
		CS-136	1.00E-03	89.0
		CS-137	4.10E-02	8.0
		BA-140	6.00E-03	92.0
		LA-140	5.00E-03	36.0
		I-131	2.00E-02	12.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
OH:TOLEDO	5/22/86			
		RU-103	3.30E-01	6.0
		CS-134	5.60E-02	17.0
		CS-137	1.20E-01	12.0
		LA-140	1.30E-02	69.0
		I-131	8.20E-02	14.0
OH:TOLEDO	5/23/86			
		RU-103	3.50E-01	5.0
		RU-106	9.60E-02	39.0
		CS-134	5.90E-02	16.0
		CS-137	1.40E-01	2.0
		BA-140	2.00E-02	76.0
		LA-140	1.10E-02	53.0
		I-131	8.10E-02	15.0
OR:PORTLAND	5/ 9/86			
		RU-103	2.46E-02	56.0
		CS-134	1.15E-02	44.0
		CS-137	2.09E-02	31.0
		I-131	7.54E-02	11.0
OR:PORTLAND	5/19/86			
		RU-103	1.90E-01	3.0
		RU-106	8.50E-02	29.0
		CS-134	1.10E-01	6.0
		CS-136	3.00E-03	65.0
		CS-137	2.20E-01	4.0
		LA-140	5.00E-03	61.0
		I-131	1.00E-01	24.0
PA:GOLDSBORO	5/12/86			
		RU-103	3.20E-02	11.0
		I-132	9.70E-03	29.0
		CS-134	5.70E-03	8.0
		CS-136	1.10E-02	29.0
		CS-137	1.20E-01	6.0
		BA-140	1.50E-02	45.0
		LA-140	1.50E-02	25.0
		I-131	1.50E-01	5.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
PA:GOLDSBORO	5/29/86			
		I-131	7.00E-03	24.0
		RU-103	3.10E-02	8.0
		CS-134	9.00E-03	20.0
		CS-137	2.10E-02	12.0
		BA-140	5.00E-03	77.0
PA:HARRISBURG	5/11/86			
		I-132	3.01E-02	32.0
		CS-134	1.01E-01	13.0
		CS-137	1.90E-01	10.0
		BA-140	3.03E-02	79.0
		LA-140	3.43E-02	35.0
		CS-136	1.70E-02	40.0
		I-131	7.19E-02	8.0
RI:PROVIDENCE	5/12/86			
		RU-103	3.00E-02	4.0
		RU-106	7.30E-03	80.0
		CS-134	7.00E-02	2.0
		CS-136	1.10E-02	8.0
		CS-137	1.50E-01	2.0
		BA-140	1.30E-02	22.0
		LA-140	1.50E-02	8.0
		I-131	2.00E-01	1.0
RI:PROVIDENCE	5/30/86			
		I-131	1.40E-02	14.0
		RU-103	5.40E-02	4.0
		RU-106	2.30E-02	43.0
		CS-134	1.80E-02	7.0
		CS-136	1.00E-03	40.0
		CS-137	3.80E-02	5.0
		BA-140	4.80E-02	60.0
		LA-140	4.30E-02	29.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
RI:PROVIDENCE	5/30/86			
		I-131	9.00E-03	9.0
		RU-103	4.60E-02	3.0
		RU-106	1.80E-02	27.0
		CS-134	2.30E-02	5.0
		CS-136	1.00E-03	35.0
		CS-137	5.20E-02	3.0
		BA-140	4.00E-03	41.0
		LA-140	4.00E-03	20.0
SC:COLUMBIA	5/15/86			
		RU-103	3.30E-02	45.0
		CS-134	3.80E-02	41.0
		CS-137	8.00E-02	24.0
		I-131	4.30E-02	22.0
SD:PIERRE	5/13/86			
		RU-106	6.70E-02	37.0
		CS-136	1.80E-02	18.0
		BA-140	6.40E-02	19.0
		LA-140	6.90E-02	9.0
		I-131	4.80E-01	2.0
SD:PIERRE	5/13/86			
		RU-103	2.10E-01	3.0
		RU-106	6.20E-02	38.0
		I-132	2.10E-02	18.0
		CS-134	9.50E-02	5.0
		CS-136	1.10E-02	24.0
		BA-140	3.60E-02	24.0
		LA-140	3.90E-02	14.0
		I-131	2.60E-01	3.0
SD:PIERRE	5/19/86			
		RU-103	2.10E-01	4.0
		RU-106	6.90E-02	38.0
		CS-134	1.10E-01	6.0
		CS-136	1.20E-02	32.0
		CS-137	2.60E-01	4.0
		BA-140	3.20E-02	36.0
		LA-140	3.30E-02	17.0
		I-131	2.60E-01	4.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
SD:PIERRE	5/20/86			
		RU-103	1.20E-01	96.0
		RU-106	1.10E-01	95.0
		CS-134	1.20E-01	12.0
		CS-137	2.60E-01	9.0
		BA-140	5.10E-02	52.0
		LA-140	4.60E-02	31.0
		I-131	2.60E-01	7.0
SD:PIERRE	5/21/86			
		CS-134	8.80E-02	24.0
		CS-137	1.90E-01	14.0
		BA-140	3.30E-02	88.0
		LA-140	3.70E-02	54.0
		I-131	1.30E-01	13.0
TN:KNOXVILLE	5/22/86			
		RU-103	7.20E-02	16.0
		CS-134	2.50E-02	30.0
		CS-137	6.10E-02	20.0
		I-131	5.80E-02	16.0
TN:KNOXVILLE	5/23/86			
		RU-103	2.00E-01	3.0
		RU-106	6.70E-02	30.0
		CS-134	4.00E-02	7.0
		CS-137	9.20E-02	5.0
		LA-140	1.50E-02	23.0
		I-131	5.20E-02	6.0
TN:NASHVILLE	5/22/86			
		RU-103	1.10E-01	9.0
		RU-106	3.90E-02	81.0
		CS-134	3.10E-02	20.0
		CS-137	6.60E-02	14.0
		I-131	5.30E-02	14.0
TN:NASHVILLE	5/23/86			
		RU-103	1.20E-01	11.0
		RU-106	4.90E-02	73.0
		CS-134	2.70E-02	26.0
		CS-137	6.00E-02	18.0
		I-131	5.80E-02	16.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
TN:NASHVILLE	5/24/86			
		RU-103	5.90E-02	4.0
		RU-106	1.70E-02	45.0
		CS-134	1.50E-02	17.0
		CS-136	1.00E-03	43.0
		CS-137	3.60E-02	7.0
		BA-140	6.00E-03	49.0
		LA-140	5.00E-03	35.0
		I-131	2.30E-02	10.0
TX:EL PASO	5/10/86			
		RU-103	8.20E-02	5.0
		RU-106	2.00E-02	90.0
		CS-134	2.60E-02	11.0
		CS-136	4.30E-03	35.0
		CS-137	5.90E-02	7.0
		BA-140	2.10E-02	55.0
		LA-140	2.00E-02	19.0
		I-131	3.10E-01	2.0
TX:EL PASO	5/11/86			
		RU-103	9.50E-02	5.0
		RU-106	3.20E-02	61.0
		CS-134	2.60E-02	11.0
		CS-136	3.80E-03	59.0
		CS-137	5.70E-02	9.0
		BA-140	2.00E-02	59.0
		LA-140	1.70E-02	23.0
		I-131	4.40E-01	2.0
TX:EL PASO	5/16/86			
		RU-103	6.10E-02	10.0
		CS-134	2.00E-02	22.0
		CS-137	4.40E-02	16.0
		LA-140	8.00E-03	53.0
		I-131	1.70E-01	4.0
TX:EL PASO	5/20/86			
		RU-103	1.20E-01	11.0
		CS-134	4.50E-02	21.0
		CS-137	8.90E-02	17.0
		BA-140	2.20E-02	74.0
		LA-140	2.00E-02	51.0
		I-131	2.00E-01	9.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
TX:EL PASO	5/21/86			
		RU-103	1.20E-01	4.0
		RU-106	4.40E-02	38.0
		CS-134	4.20E-02	9.0
		CS-136	5.00E-03	41.0
		CS-137	8.80E-02	7.0
		BA-140	2.50E-02	33.0
		LA-140	2.50E-02	18.0
		I-131	1.80E-01	4.0
UT:SALT LAKE CIT	5/11/86			
		RU-103	3.40E-01	6.0
		CS-134	8.80E-02	14.0
		CS-136	2.00E-02	49.0
		CS-137	2.00E-01	10.0
		BA-140	9.10E-02	32.0
		LA-140	7.40E-02	20.0
		I-131	6.50E-01	4.0
UT:SALT LAKE CIT	5/12/86			
		RU-103	5.30E-01	3.0
		RU-106	1.50E-01	39.0
		CS-134	2.70E-01	4.0
		CS-136	3.70E-02	28.0
		CS-137	5.40E-01	3.0
		BA-140	1.10E-01	15.0
		LA-140	1.20E-01	11.0
		I-131	1.10E+00	1.0
UT:SALT LAKE CIT	5/12/86			
		RU-103	1.40E-01	3.0
		RU-106	4.70E-02	53.0
		I-132	1.00E-02	36.0
		CS-134	5.90E-02	6.0
		CS-136	7.30E-02	26.0
		CS-137	1.30E-01	4.0
		BA-140	2.70E-02	35.0
		LA-140	2.60E-02	8.0
		I-131	3.10E-01	2.0
UT:SALT LAKE CIT	5/18/86			
		ZR-95	5.00E-03	39.0
		RU-103	2.50E-01	2.0
		RU-106	7.80E-02	23.0
		I-131	3.10E-01	2.0
		I-132	1.30E-02	14.0
		CS-134	8.20E-02	5.0
		CS-136	1.00E-02	22.0
		CS-137	1.90E-01	3.0
		BA-140	4.00E-02	21.0
		LA-140	4.50E-02	10.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
VA:VIRGINIA BEAC	5/27/86			
		I-131	1.30E-02	22.0
		RU-103	5.70E-02	7.0
		RU-106	2.60E-02	47.0
		CS-134	1.30E-02	16.0
		CS-137	2.80E-02	12.0
		LA-140	3.00E-03	66.0
WA:OLYMPIA	5/10/86			
		RU-106	2.90E-03	60.0
		I-132	3.00E-02	13.0
		CS-134	7.70E-02	6.0
		CS-136	1.30E-02	27.0
		CS-137	1.70E-01	4.0
		BA-140	3.80E-02	22.0
		LA-140	4.00E-02	13.0
		I-131	3.70E-01	2.0
WA:OLYMPIA	5/18/86			
		RU-103	3.90E-01	6.0
		RU-106	1.10E-01	61.0
		CS-134	1.30E-01	11.0
		CS-136	1.60E-02	48.0
		CS-137	3.00E-01	8.0
		BA-140	3.40E-02	66.0
		LA-140	2.80E-02	38.0
		I-131	2.60E-01	8.0
WA:SPOKANE	5/ 9/86			
		RU-103	1.90E-02	10.0
		RU-106	6.90E-03	83.0
		CS-134	1.00E-02	17.0
		CS-137	2.40E-02	10.0
		BA-140	8.10E-03	62.0
		LA-140	5.20E-03	34.0
		I-132	8.20E-03	26.0
		CS-136	2.00E-03	65.0
		I-131	7.40E-02	5.0
WA:SPOKANE	5/10/86			
		RU-103	2.50E-01	6.0
		RU-106	7.10E-02	66.0
		CS-134	1.40E-01	9.0
		CS-136	1.80E-02	37.0
		CS-137	3.00E-01	7.0
		BA-140	7.60E-02	33.0
		LA-140	6.40E-02	21.0
		I-131	8.00E-01	4.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
WA:SPOKANE	5/11/86			
		RU-103	3.20E-01	6.0
		I-132	9.30E-02	22.0
		CS-134	3.40E-01	7.0
		CS-136	5.50E-02	23.0
		CS-137	6.60E-01	5.0
		BA-140	1.00E-01	32.0
		LA-140	1.10E-01	20.0
		I-131	1.20E+00	4.0
WA:SPOKANE	5/13/86			
		RU-103	3.00E-01	6.0
		RU-106	1.20E-01	46.0
		CS-134	1.10E-01	11.0
		CS-136	2.10E-02	38.0
		CS-137	2.30E-01	8.0
		BA-140	2.80E-02	42.0
		LA-140	3.00E-02	32.0
		I-131	7.40E-01	3.0
WA:SPOKANE	5/19/86			
		RU-103	1.30E-01	3.0
		RU-106	4.30E-02	36.0
		CS-134	4.50E-02	7.0
		CS-136	5.00E-03	43.0
		CS-137	9.90E-02	5.0
		BA-140	1.90E-02	41.0
		LA-140	2.40E-02	15.0
		I-131	1.30E-01	4.0
WI:MADISON	5/22/86			
		RU-103	3.20E-01	2.0
		RU-106	1.00E-01	18.0
		CS-134	5.80E-02	6.0
		CS-136	7.00E-03	33.0
		CS-137	1.40E-01	4.0
		BA-140	2.10E-02	29.0
		LA-140	1.60E-02	17.0
		I-131	1.00E-01	4.0
WI:MADISON	5/22/86			
		RU-103	1.80E-01	7.0
		RU-106	6.90E-02	62.0
		CS-134	6.00E-02	14.0
		CS137	1.20E-01	11.0
		BA-140	3.70E-02	48.0
		LA-140	3.10E-02	30.0
		I-131	3.10E-01	6.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
WY:CHEYENNE	5/13/86			
		RU-103	2.40E-01	2.0
		RU-106	6.20E-02	31.0
		CS-134	8.70E-02	5.0
		CS-136	1.20E-02	23.0
		CS-137	1.80E-01	3.0
		BA-140	3.20E-02	26.0
		LA-140	3.60E-02	13.0
		I-131	4.30E-01	2.0
WY:CHEYENNE	5/14/86			
		RU-106	5.90E-02	86.0
		CS-136	9.70E-03	45.0
		BA-140	3.60E-02	38.0
		LA-140	2.80E-02	37.0
		I-131	3.70E-01	5.0
WY:CHEYENNE	5/15/86			
		RU-103	1.70E-01	9.0
		CS-134	7.00E-02	15.0
		CS-137	1.40E-01	12.0
		I-131	2.60E-01	6.0
WY:CHEYENNE	5/16/86			
		ZR-95	7.00E-03	24.0
		RU-103	1.90E-01	2.0
		RU-106	5.90E-02	23.0
		CS-134	6.00E-02	5.0
		CS-136	7.00E-03	24.0
		CS-137	1.30E-01	3.0
		BA-140	3.20E-02	34.0
		LA-140	3.30E-02	9.0
		I-131	3.10E-01	2.0
WY:CHEYENNE	5/16/86			
		RU-103	1.30E-01	2.0
		RU-106	3.90E-02	25.0
		I-132	5.80E-03	17.0
		CS-134	5.60E-02	3.0
		CS-136	5.40E-03	18.0
		CS-137	1.20E-01	2.0
		BA-140	2.00E-02	15.0
		LA-140	2.10E-02	9.0
		I-131	1.90E-01	1.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
WY:CHEYENNE	5/20/86			
		RU-103	1.00E-01	4.0
		RU-106	4.30E-02	35.0
		CS-134	2.70E-02	9.0
		CS-136	3.20E-02	77.0
		CS-137	7.10E-02	5.0
		BA-140	1.60E-02	34.0
		LA-140	1.60E-02	19.0
		I-131	1.30E-01	3.0
WY:CHEYENNE	5/21/86			
		RU-103	6.40E-02	4.0
		RU-106	2.10E-02	57.0
		CS-134	1.90E-02	14.0
		BA-140	7.00E-03	66.0
		LA-140	9.00E-03	25.0
		I-131	6.10E-02	5.0
WY:CHEYENNE	5/22/86			
		RU-103	6.30E-02	13.0
		CS-134	1.40E-02	38.0
		CS-137	4.50E-02	18.0
		I-131	7.40E-02	18.0
WY:CHEYENNE	5/23/86			
		RU-103	8.10E-02	4.0
		RU-106	2.80E-02	42.0
		CS-134	2.10E-02	10.0
		CS-137	4.60E-02	7.0
		BA-140	9.00E-03	26.0
		LA-140	1.00E-02	24.0
		I-131	1.20E-01	4.0
WY:CHEYENNE	5/29/86			
		I-131	1.00E-02	9.0
		RU-103	2.50E-02	6.0
		RU-106	1.10E-02	62.0
		CS-134	7.00E-03	13.0
		CS-136	1.00E-03	84.0
		CS-137	1.70E-02	9.0
		LA-140	2.00E-03	66.0

TABLE 4.1

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
AL:MONTGOMERY	6/ 3/86			
		RU-103	1.0000E-02	8.0
		RU-106	5.0000E-03	74.0
		CS-134	3.0000E-03	26.0
		CS-137	7.0000E-03	13.0
		BA-140	2.0000E-03	88.0
		LA-140	2.0000E-03	40.0
AL:MONTGOMERY	6/ 6/86			
		RU-103	1.2000E-02	7.0
		I-131	1.0000E-03	72.0
		CS-134	3.0000E-03	20.0
		CS-137	7.0000E-03	11.0
AL:MONTGOMERY	6/10/86			
		RU-103	1.1000E-02	8.0
		CS-134	3.0000E-03	60.0
		CS-137	7.0000E-03	12.0
AZ:PHOENIX	6/ 3/86			
		RU-103	1.0000E-02	20.0
		RU-106	1.0000E-02	58.0
		CS-134	3.0000E-03	58.0
		CS-137	6.0000E-03	36.0
		I-131	4.0000E-03	43.0
AZ:PHOENIX	6/ 4/86			
		RU-103	9.0000E-03	47.0
		CS-137	4.0000E-03	87.0
AZ:PHOENIX	6/ 5/86			
		RU-103	1.3000E-02	11.0
		CS-134	2.0000E-03	36.0
		CS-137	7.0000E-03	21.0
		I-131	5.0000E-03	29.0
CT:HARTFORD	6/ 2/86			
		RU-103	3.5000E-02	3.0
		RU-106	1.3000E-02	27.0
		CS-134	1.1000E-02	9.0
		CS-136	1.0000E-03	38.0
		CS-137	2.6000E-02	5.0
		BA-140	3.0000E-03	39.0
		LA-140	3.0000E-03	24.0
		I-131	4.0000E-03	17.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	$\pm 2s$ (in percent)
CT:HARTFORD	6/ 5/86			
		RU-103	9.6000E-02	7.0
		RU-106	4.2000E-02	82.0
		CS-134	2.6000E-02	16.0
		CS-137	5.6000E-02	11.0
		I-131	1.1000E-02	27.0
DE:WILMINGTON	6/ 5/86			
		RU-103	1.3000E-01	2.0
		RU-106	5.1000E-02	15.0
		CS-134	3.2000E-02	5.0
		CS-137	8.1000E-02	3.0
		BA-140	6.0000E-03	44.0
		LA-140	4.0000E-03	25.0
		I-131	1.6000E-02	11.0
ID:IDAHO FALLS	6/ 1/86			
		I-131	9.0000E-03	23.0
		RU-103	1.9000E-02	9.0
		CS-137	1.1000E-02	17.0
ID:IDAHO FALLS	6/ 2/86			
		I-131	7.0000E-03	25.0
		RU-103	1.0000E-02	19.0
		CS-137	6.0000E-03	37.0
IL:CHICAGO	6/ 5/86			
		RU-103	1.4000E-01	1.0
		RU-106	5.4000E-02	12.0
		CS-134	2.9000E-02	4.0
		CS-136	1.0000E-03	58.0
		CS-137	7.3000E-02	2.0
		BA-140	5.0000E-03	40.0
		LA-140	4.0000E-03	20.0
		I-131	1.2000E-02	10.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
IN:INDIANAPOLIS	6/ 3/86			
		RU-103	1.5000E-01	3.0
		RU-106	5.2000E-02	28.0
		CS-134	3.4000E-02	8.0
		CS-136	3.0000E-03	67.0
		CS-137	7.8000E-02	5.0
		BA-140	6.0000E-03	92.0
		LA-140	5.0000E-03	43.0
		I-131	2.7000E-02	8.0
KS:TOPEKA	6/ 2/86			
		RU-103	7.0000E-03	10.0
		CS-134	1.0000E-03	38.0
		CS-137	5.0000E-03	14.0
		I-131	2.0000E-03	28.0
LA:NEW ORLEANS	6/ 3/86			
		RU-103	2.7000E-02	10.0
		CS-137	7.0000E-03	25.0
		CS-137	1.9000E-02	15.0
		BA-140	6.0000E-03	74.0
		LA-140	3.0000E-03	60.0
		I-131	2.0000E-03	84.0
MA:LAWRENCE	6/ 5/86			
		RU-103	1.2000E-01	2.0
		RU-106	5.3000E-02	15.0
		CS-134	3.7000E-02	4.0
		CS-136	1.0000E-03	70.0
		CS-137	7.7000E-02	3.0
		LA-140	4.0000E-03	27.0
		I-131	2.8000E-02	10.0
ME:AUGUSTA	6/ 3/86			
		RU-103	6.3000E-02	2.0
		CS-134	1.7000E-02	6.0
		CS-136	1.0000E-03	37.0
		CS-137	4.2000E-02	3.0
		BA-140	3.0000E-03	50.0
		LA-140	2.0000E-03	23.0
		I-131	2.1000E-02	6.0
ME:AUGUSTA	6/ 6/86			
		RU-103	1.0000E-01	6.0
		RU-106	4.1000E-02	63.0
		CS-134	3.1000E-02	14.0
		CS-137	7.2000E-02	8.0
		LA-140	3.0000E-03	67.0
		I-131	9.0000E-03	41.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
MI:LANSING	6/ 3/86			
		RU-103	2.5000E-01	2.0
		RU-106	1.0000E-01	16.0
		CS-134	5.6000E-02	5.0
		CS-137	1.3000E-01	4.0
		BA-140	7.0000E-03	48.0
		LA-140	7.0000E-03	29.0
		I-131	6.4000E-02	5.0
MO:JEFFERSON CITY	6/ 2/86			
		RU-103	1.7000E-02	25.0
		CS-134	6.0000E-03	67.0
		CS-137	1.1000E-02	39.0
MO:JEFFERSON CITY	6/ 4/86			
		RU-103	1.7000E-02	30.0
		CS-137	1.1000E-02	47.0
MS:JACKSON	6/ 4/86			
		RU-103	2.0000E-02	18.0
		CS-134	7.0000E-03	45.0
		CS-137	1.5000E-02	24.0
		I-131	2.0000E-03	58.0
MT:HELENA	6/ 2/86			
		I-131	9.0000E-03	11.0
		RU-103	1.9000E-02	5.0
		RU-106	9.0000E-03	40.0
		CS-134	4.0000E-03	16.0
		CS-137	9.0000E-03	10.0
		BA-140	3.0000E-03	50.0
		LA-140	2.0000E-03	36.0
MT:HELENA	6/ 3/86			
		RU-103	1.4000E-02	30.0
		CS-137	8.0000E-03	48.0
		I-131	6.0000E-03	60.0
MT:HELENA	6/ 4/86			
		RU-103	2.1000E-02	19.0
		CS-137	1.0000E-02	46.0
		I-131	8.0000E-03	41.0
NJ:TRENTON	6/ 5/86			
		RU-103	1.0000E-01	6.0
		RU-106	4.5000E-02	46.0
		CS-134	3.4000E-02	13.0
		CS-137	7.9000E-02	9.0
		I-131	1.6000E-02	75.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
NY:ALBANY	6/ 3/86			
		RU-103	5.1000E-02	2.0
		RU-106	2.0000E-02	29.0
		CS-134	1.8000E-02	4.0
		CS-137	3.9000E-02	3.0
		BA-140	3.0000E-03	36.0
		LA-140	3.0000E-03	20.0
		I-131	1.1000E-02	8.0
NY:NEW YORK CITY	6/ 3/86			
		RU-103	3.9000E-02	12.0
		CS-134	1.6000E-02	26.0
		CS-137	2.7000E-02	17.0
		LA-140	4.0000E-03	74.0
		I-131	9.0000E-03	32.0
NY:NEW YORK CITY	6/ 6/86			
		RU-103	1.0000E-01	6.0
		RU-106	4.0000E-02	43.0
		CS-134	2.7000E-02	17.0
		CS-137	6.8000E-02	8.0
		LA-140	3.0000E-03	62.0
		I-131	1.1000E-02	30.0
NY:NIAGARA FALLS	6/ 2/86			
		I-131	1.0000E-02	11.0
		RU-103	5.0000E-02	5.0
		RU-106	1.8000E-02	38.0
		CS-134	1.5000E-02	21.0
		CS-137	3.3000E-02	8.0
		LA-140	3.0000E-03	48.0
NY:NIAGARA FALLS	6/ 3/86			
		RU-103	1.7000E-01	3.0
		RU-106	6.3000E-02	28.0
		CS-134	4.5000E-02	9.0
		CS-136	2.0000E-03	35.0
		CS-137	1.0000E-01	5.0
		LA-140	8.0000E-03	34.0
		I-131	3.4000E-02	8.0
NY:SYRACUSE	6/ 2/86			
		RU-103	5.1000E-02	4.0
		RU-106	2.1000E-02	31.0
		CS-134	1.6000E-02	8.0
		CS-137	3.5000E-02	5.0
		LA-140	4.0000E-03	30.0
		I-131	9.0000E-03	33.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
NY:SYRACUSE	6/ 5/86			
		RU-103	1.0000E-01	2.0
		RU-106	4.2000E-02	16.0
		CS-134	2.8000E-02	5.0
		CS-136	1.0000E-03	45.0
		CS-137	6.5000E-02	3.0
		LA-140	3.0000E-03	27.0
		I-131	1.3000E-02	8.0
NY:YAPHANK	6/ 6/86			
		RU-103	7.9000E-02	2.0
		RU-106	3.2000E-02	15.0
		CS-134	2.5000E-02	4.0
		CS-136	1.0000E-03	33.0
		CS-137	5.7000E-02	3.0
		BA-140	3.0000E-03	36.0
		LA-140	3.0000E-03	21.0
		I-131	1.0000E-02	11.0
OH:COLUMBUS	6/ 3/86			
		RU-103	2.0000E-01	9.0
		RU-106	1.1000E-01	54.0
		CS-134	5.7000E-02	20.0
		CS-137	1.1000E-01	14.0
		BA-140	1.9000E-02	90.0
		I-131	4.8000E-02	19.0
OH:COLUMBUS	6/ 4/86			
		RU-103	1.3000E-01	14.0
		CS-134	2.9000E-02	70.0
		CS-137	6.4000E-02	26.0
		I-131	1.9000E-02	42.0
OH:COLUMBUS	6/ 5/86			
		RU-103	1.9000E-02	7.0
		RU-106	1.0000E-02	72.0
		CS-134	6.0000E-03	21.0
		CS-137	1.2000E-02	13.0
		I-131	2.0000E-03	62.0
OH:PAINESVILLE	6/ 3/86			
		RU-103	7.3000E-02	7.0
		RU-106	2.6000E-02	58.0
		CS-134	2.0000E-02	18.0
		CS-137	4.4000E-02	11.0
		LA-140	3.0000E-03	72.0
		I-131	1.6000E-02	19.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
OH:TOLEDO	6/ 5/86			
		RU-103	1.6000E-01	2.0
		RU-106	6.8000E-02	14.0
		CS-134	4.2000E-02	6.0
		CS-136	2.0000E-03	44.0
		CS-137	9.4000E-02	3.0
		LA-140	5.0000E-03	30.0
		I-131	2.2000E-02	7.0
PA:GOLDSBORO	6/ 2/86			
		I-131	3.0000E-03	20.0
		RU-103	2.2000E-02	5.0
		RU-106	1.0000E-02	57.0
		CS-134	6.0000E-03	13.0
		CS-136	1.0000E-03	69.0
		CS-137	1.5000E-02	7.0
		BA-140	3.0000E-03	82.0
PA:GOLDSBORO	6/ 5/86			
		RU-103	1.0000E-01	2.0
		RU-106	3.9000E-02	15.0
		CS-134	2.9000E-02	4.0
		CS-136	1.0000E-03	59.0
		CS-137	6.5000E-02	3.0
		LA-140	4.0000E-03	23.0
		I-131	1.3000E-02	11.0
PA:HARRISBURG	6/ 5/86			
		RU-103	1.1000E-01	6.0
		RU-106	3.7000E-02	38.0
		CS-134	2.9000E-02	14.0
		CS-137	6.8000E-02	9.0
		LA-140	6.0400E-01	62.0
		I-131	1.2000E-02	37.0
PA:PITTSBURGH	6/ 6/86			
		RU-103	7.9000E-02	7.0
		CS-134	2.1000E-02	15.0
		CS-137	4.8000E-02	11.0
		LA-140	4.0000E-03	64.0
		I-131	6.0000E-03	44.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
RI:PROVIDENCE	6/ 3/86			
		RU-103	5.3000E-02	3.0
		CS-134	1.7000E-02	9.0
		CS-136	1.0000E-03	62.0
		CS-137	3.6000E-02	5.0
		BA-140	4.0000E-03	45.0
		LA-140	3.0000E-03	38.0
		I-131	1.4000E-02	7.0
RI:PROVIDENCE	6/ 6/86			
		RU-103	8.4000E-02	10.0
		RU-106	4.2000E-02	74.0
		CS-134	2.9000E-02	22.0
		CS-137	5.9000E-02	14.0
		I-131	8.0000E-03	50.0
SD:PIERRE	6/ 2/86			
		RU-103	1.7000E-02	14.0
		CS-134	5.0000E-03	84.0
		CS-137	1.2000E-02	20.0
		I-131	6.0000E-03	28.0
TX:EL PASO	6/ 5/86			
		RU-103	4.0000E-03	34.0
		CS-137	2.0000E-03	100.0
		I-131	2.0000E-03	65.0
VA:LYNCHBURG	6/ 2/86			
		I-131	2.0000E-03	28.0
		RU-103	7.0000E-03	12.0
		CS-134	2.0000E-03	24.0
		CS-137	5.0000E-03	18.0
VA:LYNCHBURG	6/ 4/86			
		RU-103	1.4000E-01	3.0
		RU-106	5.3000E-02	29.0
		CS-134	3.1000E-02	10.0
		CS-136	2.0000E-03	63.0
		CS-137	6.9000E-02	6.0
		LA-140	6.0000E-03	44.0
		I-131	1.7000E-02	12.0

TABLE 4.1 (CONTINUED)

AIRBORNE PARTICULATES
GAMMA RESULTS

LOCATION	DATE	NUCLIDE	pCi/m^3	±2s (in percent)
VA:LYNCHBURG	6/ 5/86			
		RU-103	8.6000E-02	3.0
		RU-106	3.0000E-02	34.0
		CS-134	1.8000E-02	10.0
		CS-137	4.4000E-02	7.0
		LA-140	4.0000E-03	42.0
		I-131	6.0000E-03	36.0
VA:VIRGINIA BEACH	6/10/86			
		RU-103	3.6000E-02	6.0
		RU-106	1.4000E-02	43.0
		CS-134	1.0000E-03	13.0
		CS-137	2.1000E-02	10.0
		I-131	3.0000E-03	36.0

TABLE 5

GROSS BETA CONCENTRATION IN PRECIPITATION

APRIL 1986

LOCATION	DEPTH (mm)	ACT. (nCi/m^2)	± 2s
AL:MONTGOMERY	26.0	0.06	0.01
AR:LITTLE ROCK	166.0	0.15	0.07
CA:BERKELEY	14.3	0.01	0.01
CO:DENVER	7.1	0.06	0.01
CT:HARTFORD	30.2	0.09	0.02
FL:JACKSONVILLE	16.4	0.03	0.01
FL:MIAMI	24.0	0.03	0.01
ID:BOISE	6.0	0.01	0.00
ID:IDAHO FALLS	42.2	0.08	0.02
IL:CHICAGO	26.9	0.02	0.01
MI:LANSING	46.0	0.08	0.02
MN:MINNEAPOLIS	143.6	0.10	0.06
MS:JACKSON	26.5	0.01	0.01
ND:BISMARCK	12.8	0.06	0.01
NH:CONCORD	26.0	0.03	0.01
NJ:TRENTON	118.4	0.33	0.07
NV:LAS VEGAS	4.5	0.01	0.00
NY:NEW YORK CITY	18.8	0.09	0.01
NY:NIAGARA FALLS	114.2	0.10	0.05
NY:YAPHANK	62.0	0.19	0.04
OH:PAINESVILLE	56.0	0.15	0.03
OH:TOLEDO	16.0	0.01	0.01
OR:PORTLAND	29.2	0.05	0.02
PA:MIDDLETOWN	78.0	0.09	0.04
SC:BARNWELL	10.0	0.02	0.01
SC:COLUMBIA	14.0	0.08	0.01
TN:KNOXVILLE	16.2	0.02	0.01
TX:AUSTIN	14.0	0.03	0.01
VA:LYNCHBURG	15.2	0.03	0.01
WI:MADISON	25.0	0.06	0.01

s = SIGMA COUNTING ERROR

TABLE 6

GROSS BETA CONCENTRATION IN PRECIPITATION

MAY 1986

LOCATION	DATE	DEPTH (mm)	ACT. (nCi/m^2)	± 2s
AK:ANCHORAGE	5/08/86	0.3	0.01	0.01
AK:ANCHORAGE	5/13/86	8.0	0.30	0.33
AK:ANCHORAGE	5/13/86	8.0	0.29	0.31
AK:ANCHORAGE	5/14/86	8.0	0.23	0.41
AK:BETHEL	5/13/86	8.0	0.16	0.30
AK:CHEFORNAK	5/13/86	6.0	0.65	0.26
AK:JUNEAU	5/07/86	0.3	0.00	0.01
AK:JUNEAU	5/14/86	3.0	0.19	0.13
AK:JUNEAU	5/15/86	3.0	0.20	0.15
AK:KETCHIKAN	5/10/86	0.3	0.16	0.02
AK:KETCHIKAN	5/11/86	0.3	0.10	0.02
AK:KWIGILLINGOK	5/14/86	8.0	0.01	0.29
AK:KWIGILLINGOK	5/14/86	4.0	0.69	0.21
AK:PHS HOSPITAL	5/13/86	8.0	0.29	0.30
AK:PHS HOSPITAL	5/13/86	8.0	0.28	0.27
AL:DOTHAN	5/27/86	0.5	0.04	0.02
AL:DOTHAN	5/28/86	0.4	0.01	0.02
AL:MONTGOMERY	5/11/86	0.7	0.10	0.03
AL:MONTGOMERY	5/12/86	1.4	0.06	0.05
AL:MONTGOMERY	5/18/86	7.6	0.57	0.36
AL:MONTGOMERY	5/19/86	42.4	2.38	1.76
AL:MONTGOMERY	5/20/86	8.0	0.26	0.44
AL:MONTGOMERY	5/27/86	6.0	0.16	0.23
AR:LITTLE ROCK	5/07/86	0.6	0.02	0.02
AR:LITTLE ROCK	5/09/86	14.0	0.35	0.56
AR:LITTLE ROCK	5/10/86	2.3	0.09	0.10
AR:LITTLE ROCK	5/11/86	20.0	0.56	1.09
AR:LITTLE ROCK	5/15/86	4.0	0.10	0.16
AR:LITTLE ROCK	5/17/86	26.0	0.13	1.05
AR:LITTLE ROCK	5/18/86	3.0	0.06	0.12
AR:LITTLE ROCK	5/19/86	4.0	0.07	0.16
AR:LITTLE ROCK	5/28/86	2.0	0.08	0.08
AZ:PHOENIX	5/21/86	8.0	0.26	0.32
CA:BERKELEY	5/07/86	2.0	0.03	0.07
CO:DENVER	5/09/86	0.5	0.02	0.02
CO:DENVER	5/20/86	1.5	0.06	0.06

TABLE 6 (CONTINUED)

GROSS BETA CONCENTRATION IN PRECIPITATION

MAY 1986

LOCATION	DATE	DEPTH (mm)	ACT. ± 2s (nCi/m^2)	
CT:HARTFORD	5/07/86	0.4	0.03	0.02
CT:HARTFORD	5/09/86	4.8	0.18	0.20
CT:HARTFORD	5/09/86	0.3	0.00	0.01
CT:HARTFORD	5/17/86	5.6	0.15	0.23
CT:HARTFORD	5/21/86	0.6	0.05	0.03
CT:HARTFORD	5/22/86	8.0	-0.21	0.37
CT:HARTFORD	5/23/86	1.0	0.04	0.04
DE:WILMINGTON	5/19/86	6.0	-0.02	0.26
DE:WILMINGTON	5/20/86	10.0	0.27	0.40
DE:WILMINGTON	5/21/86	12.0	0.33	0.47
DE:WILMINGTON	5/26/86	13.0	0.33	0.55
FL:JACKSONVILLE	5/08/86	2.4	0.04	0.09
FL:JACKSONVILLE	5/10/86	1.5	0.09	0.06
FL:JACKSONVILLE	5/20/86	42.0	0.54	1.47
FL:MIAMI	5/05/86	24.0	1.06	0.85
FL:MIAMI	5/05/86	25.0	0.88	1.04
FL:MIAMI	5/10/86	1.6	0.10	0.06
FL:MIAMI	5/15/86	0.4	0.04	0.02
FL:MIAMI	5/16/86	4.0	0.20	0.17
FL:MIAMI	5/21/86	17.0	0.55	0.75
FL:MIAMI	5/22/86	40.0	1.10	1.58
FL:MIAMI	5/23/86	15.0	0.17	0.55
GA:ATLANTA	5/07/86	7.6	0.11	0.42
GA:BLAKELY	5/07/86	0.8	0.03	0.03
HI:HONOLULU	5/06/86	4.6	0.03	0.19
HI:HONOLULU	5/10/86	16.6	0.10	0.68
HI:HONOLULU	5/16/86	4.0	0.44	0.20
IA:IOWA CITY	5/08/86	13.0	0.64	0.51
IA:IOWA CITY	5/09/86	5.8	0.19	0.20
IA:IOWA CITY	5/12/86	4.4	0.06	0.17
IA:IOWA CITY	5/14/86	8.0	0.45	0.33
IA:IOWA CITY	5/16/86	21.2	0.81	0.84
IA:IOWA CITY	5/19/86	39.4	1.42	1.56
IA:IOWA CITY	5/27/86	44.0	1.52	1.84
IA:IOWA CITY	5/28/86	2.0	0.13	0.11
IA:IOWA CITY	5/29/86	8.0	0.48	0.29

TABLE 6 (CONTINUED)

GROSS BETA CONCENTRATION IN PRECIPITATION

MAY 1986

LOCATION	DATE	DEPTH (mm)	ACT. (nCi/m^2)	± 2s
ID:BOISE	5/05/86	4.0	0.06	0.16
ID:BOISE	5/07/86	9.4	-0.05	0.38
ID:BOISE	5/10/86	10.0	4.01	0.66
ID:BOISE	5/10/86	4.0	3.19	0.35
ID:BOISE	5/12/86	2.0	1.08	0.15
ID:IDAHO FALLS	5/05/86	2.8	0.04	0.10
ID:IDAHO FALLS	5/06/86	0.3	0.02	0.01
ID:IDAHO FALLS	5/07/86	1.8	0.11	0.08
ID:IDAHO FALLS	5/08/86	3.8	0.24	0.17
ID:IDAHO FALLS	5/09/86	4.0	0.12	0.16
ID:IDAHO FALLS	5/10/86	1.2	1.21	0.12
ID:IDAHO FALLS	5/11/86	11.3	5.12	0.77
ID:IDAHO FALLS	5/16/86	0.7	1.34	0.09
ID:IDAHO FALLS	5/22/86	5.8	0.40	0.22
IL:CHICAGO	5/12/86	4.0	0.21	0.17
IL:CHICAGO	5/14/86	11.5	0.59	0.64
IL:CHICAGO	5/16/86	10.6	0.37	0.39
IL:CHICAGO	5/17/86	0.6	0.03	0.02
IL:CHICAGO	5/18/86	2.6	-0.04	0.13
IL:CHICAGO	5/27/86	17.8	1.33	0.65
IN:INDIANAPOLIS	5/07/86	12.0	0.44	0.63
IN:INDIANAPOLIS	5/08/86	33.0	2.77	1.46
IN:INDIANAPOLIS	5/12/86	3.0	0.06	0.15
IN:INDIANAPOLIS	5/14/86	11.0	0.27	0.36
IN:INDIANAPOLIS	5/16/86	29.0	-0.29	1.28
IN:INDIANAPOLIS	5/19/86	7.0	0.18	0.28
KS:TOPEKA	5/06/86	7.0	-0.06	0.34
KS:TOPEKA	5/07/86	6.6	0.11	0.24
KS:TOPEKA	5/09/86	27.0	0.16	1.09
KS:TOPEKA	5/10/86	42.0	1.72	1.55
KS:TOPEKA	5/13/86	26.0	1.59	1.18
KS:TOPEKA	5/15/86	5.0	0.31	0.20
KS:TOPEKA	5/17/86	42.0	0.55	0.57
KS:TOPEKA	5/30/86	2.0	0.08	0.08

TABLE 6 (CONTINUED)

GROSS BETA CONCENTRATION IN PRECIPITATION

MAY 1986

LOCATION	DATE	DEPTH (mm)	ACT. (nCi/m^2)	± 2s
KY:FRANKFORT	5/07/86	1.0	0.00	0.00
KY:FRANKFORT	5/08/86	5.0	0.02	0.19
KY:FRANKFORT	5/12/86	22.0	1.61	0.86
KY:FRANKFORT	5/13/86	1.0	0.02	0.04
KY:FRANKFORT	5/13/86	18.0	0.45	0.98
KY:FRANKFORT	5/14/86	41.0	1.28	1.70
KY:FRANKFORT	5/19/86	15.0	0.57	0.60
KY:FRANKFORT	5/20/86	1.0	0.04	0.04
KY:FRANKFORT	5/27/86	34.5	0.93	1.30
LA:NEW ORLEANS	5/12/86	2.0	0.13	0.09
LA:NEW ORLEANS	5/15/86	3.0	0.26	0.14
LA:NEW ORLEANS	5/19/86	16.0	0.29	0.58
LA:NEW ORLEANS	5/27/86	7.5	0.23	0.09
LA:NEW ORLEANS	5/30/86	9.0	0.08	0.44
ME:AUGUSTA	5/07/86	3.2	0.04	0.13
ME:AUGUSTA	5/08/86	6.0	0.18	0.26
ME:AUGUSTA	5/09/86	2.4	0.18	0.14
ME:AUGUSTA	5/17/86	4.0	0.10	0.20
ME:AUGUSTA	5/20/86	2.4	0.18	0.11
ME:AUGUSTA	5/22/86	1.6	0.07	0.07
ME:AUGUSTA	5/23/86	10.0	1.17	0.49
ME:AUGUSTA	5/27/86	30.0	0.78	1.21
MI:LANSING	5/07/86	1.4	0.02	0.05
MI:LANSING	5/15/86	5.4	0.16	0.23
MI:LANSING	5/16/86	5.0	0.12	0.19
MI:LANSING	5/19/86	26.4	0.96	1.12
MI:LANSING	5/20/86	7.3	0.45	0.29
MI:LANSING	5/22/86	2.5	0.72	0.14
MI:LANSING	5/23/86	0.7	0.07	0.03
MI:LANSING	5/28/86	4.8	0.27	0.20
MN:MINNEAPOLIS	5/08/86	6.0	0.07	0.22
MN:MINNEAPOLIS	5/10/86	3.0	0.08	0.12
MN:MINNEAPOLIS	5/13/86	2.0	0.20	0.09
MN:MINNEAPOLIS	5/14/86	7.0	0.99	0.35
MN:MINNEAPOLIS	5/24/86	0.6	0.12	0.03
MN:MINNEAPOLIS	5/25/86	0.6	0.06	0.03
MN:MINNEAPOLIS	5/26/86	18.2	0.75	0.68

TABLE 6 (CONTINUED)

GROSS BETA CONCENTRATION IN PRECIPITATION

MAY 1986

LOCATION	DATE	DEPTH (mm)	ACT.	± 2s (nCi/m^2)
MO:JEFFERSON CITY	5/08/86	4.2	0.03	0.17
MO:JEFFERSON CITY	5/09/86	1.9	0.07	0.08
MO:JEFFERSON CITY	5/10/86	2.2	0.05	0.08
MO:JEFFERSON CITY	5/11/86	4.8	0.24	0.17
MO:JEFFERSON CITY	5/13/86	5.6	0.23	0.22
MO:JEFFERSON CITY	5/14/86	2.2	0.31	0.11
MO:JEFFERSON CITY	5/15/86	6.6	0.17	0.24
MO:JEFFERSON CITY	5/16/86	3.4	0.44	0.17
MO:JEFFERSON CITY	5/17/86	8.4	-0.32	0.34
MO:JEFFERSON CITY	5/18/86	1.9	0.05	0.08
MO:JEFFERSON CITY	5/26/86	8.0	0.24	0.33
MO:JEFFERSON CITY	5/27/86	2.0	0.10	0.08
MO:JEFFERSON CITY	5/28/86	4.0	0.18	0.15
MS:JACKSON	5/12/86	24.0	0.39	1.23
MS:JACKSON	5/17/86	42.0	0.53	1.59
MS:JACKSON	5/18/86	5.6	-0.07	0.20
MS:JACKSON	5/26/86	38.5	2.66	1.81
MS:JACKSON	5/27/86	41.0	1.93	1.76
MS:JACKSON	5/28/86	10.0	0.41	0.33
MS:JACKSON	5/29/86	6.4	0.17	0.27
MT:HELENA	5/08/86	8.0	0.26	0.32
MT:HELENA	5/09/86	5.0	0.10	0.19
MT:HELENA	5/12/86	13.4	6.25	0.96
MT:HELENA	5/14/86	2.0	0.72	0.13
NC:CHARLOTTE	5/20/86	1.6	0.01	0.06
NC:CHARLOTTE	5/28/86	4.0	0.36	0.18
NC:WILMINGTON	5/21/86	8.0	0.27	0.31
ND:BISMARCK	5/05/86	1.8	0.08	0.08
ND:BISMARCK	5/06/86	2.0	0.06	0.07
ND:BISMARCK	5/08/86	6.8	0.43	0.30
ND:BISMARCK	5/12/86	1.1	0.36	0.07
ND:BISMARCK	5/16/86	0.6	0.18	0.04
ND:BISMARCK	5/19/86	0.6	0.30	0.05
ND:BISMARCK	5/23/86	20.6	2.00	0.93
ND:BISMARCK	5/24/86	4.8	0.15	0.18
ND:BISMARCK	5/25/86	3.2	0.14	0.13
ND:BISMARCK	5/26/86	1.5	0.06	0.05

TABLE 6 (CONTINUED)

GROSS BETA CONCENTRATION IN PRECIPITATION

MAY 1986

LOCATION	DATE	DEPTH (mm)	ACT. ± 2s (nCi/m^2)	
NE:LINCOLN	5/09/86	2.0	0.09	0.08
NE:LINCOLN	5/10/86	2.0	0.13	0.08
NE:LINCOLN	5/15/86	0.2	0.11	0.01
NE:LINCOLN	5/17/86	7.0	0.10	0.08
NE:LINCOLN	5/28/86	3.0	0.21	0.13
NE:SCOTTSBLUFF	5/10/86	2.0	0.08	0.09
NH:CONCORD	5/06/86	4.6	0.17	0.18
NH:CONCORD	5/08/86	1.1	0.07	0.04
NH:CONCORD	5/09/86	3.0	0.17	0.13
NH:CONCORD	5/13/86	0.3	0.06	0.02
NH:CONCORD	5/17/86	0.8	0.09	0.03
NH:CONCORD	5/22/86	6.0	0.36	0.22
NH:CONCORD	5/23/86	0.3	0.04	0.02
NH:CONCORD	5/24/86	5.5	0.07	0.21
NH:CONCORD	5/25/86	13.0	0.39	0.51
NH:CONCORD	5/28/86	1.4	0.07	0.05
NJ:TRENTON	5/22/86	13.8	0.51	0.46
NJ:TRENTON	5/23/86	0.6	0.05	0.03
NM:SANTA FE	5/09/86	1.2	0.27	0.07
NM:SANTA FE	5/09/86	3.0	0.53	0.15
NM:SANTA FE	5/17/86	13.0	1.13	0.63
NM:SANTA FE	5/28/86	6.0	0.36	0.24
NV:LAS VEGAS	5/07/86	0.3	0.06	0.02
NY:ALBANY	5/07/86	0.9	0.07	0.04
NY:ALBANY	5/09/86	1.2	0.08	0.06
NY:ALBANY	5/17/86	9.4	0.26	0.38
NY:ALBANY	5/21/86	3.9	0.17	0.15
NY:ALBANY	5/22/86	40.7	0.59	1.30
NY:ALBANY	5/23/86	6.5	0.86	0.40
NY:ALBANY	5/27/86	8.9	0.45	0.40
NY:NEW YORK CITY	5/09/86	1.0	0.07	0.04
NY:NEW YORK CITY	5/15/86	1.8	0.35	0.12
NY:NEW YORK CITY	5/19/86	1.6	0.09	0.06
NY:NEW YORK CITY	5/20/86	0.3	0.02	0.02
NY:NEW YORK CITY	5/20/86	7.5	0.26	0.30
NY:NEW YORK CITY	5/22/86	8.0	0.34	0.35

TABLE 6 (CONTINUED)

GROSS BETA CONCENTRATION IN PRECIPITATION

MAY 1986

LOCATION	DATE	DEPTH (mm)	ACT. (nCi/m^2)	± 2s
NY:NIAGARA FALLS	5/07/86	6.5	0.02	0.35
NY:NIAGARA FALLS	5/16/86	5.0	0.29	0.28
NY:NIAGARA FALLS	5/19/86	16.0	-0.16	0.58
NY:NIAGARA FALLS	5/20/86	2.0	0.01	0.10
NY:NIAGARA FALLS	5/20/86	40.0	1.56	1.51
NY:NIAGARA FALLS	5/23/86	12.0	0.67	0.53
NY:SYRACUSE	5/05/86	0.4	0.01	0.02
NY:SYRACUSE	5/16/86	3.0	0.21	0.14
NY:SYRACUSE	5/17/86	8.0	0.16	0.40
NY:SYRACUSE	5/19/86	16.0	0.74	0.72
NY:SYRACUSE	5/20/86	10.0	0.54	0.44
NY:SYRACUSE	5/20/86	8.0	0.15	0.29
NY:SYRACUSE	5/22/86	3.0	0.18	0.13
NY:SYRACUSE	5/23/86	0.3	0.01	0.02
NY:SYRACUSE	5/27/86	1.0	0.05	0.04
NY:YAPHANK	5/08/86	2.0	0.12	0.08
NY:YAPHANK	5/17/86	1.6	0.10	0.07
NY:YAPHANK	5/22/86	11.0	0.62	0.46
NY:YAPHANK	5/23/86	1.2	0.03	0.05
OH:COLUMBUS	5/07/86	7.0	0.11	0.28
OH:COLUMBUS	5/13/86	2.8	0.12	0.16
OH:COLUMBUS	5/15/86	3.2	0.45	0.16
OH:COLUMBUS	5/16/86	32.0	1.57	1.70
OH:COLUMBUS	5/19/86	5.6	0.56	0.31
OH:COLUMBUS	5/23/86	2.8	0.85	0.20
OH:COLUMBUS	5/28/86	26.0	1.02	1.03
OH:PAINESVILLE	5/14/86	0.3	0.01	0.01
OH:PAINESVILLE	5/16/86	22.0	1.01	0.85
OH:PAINESVILLE	5/19/86	38.0	1.14	1.44
OH:PAINESVILLE	5/20/86	12.0	0.49	0.51
OH:PAINESVILLE	5/22/86	3.0	0.10	0.12
OH:PAINESVILLE	5/28/86	17.0	0.34	0.69
OH:TOLEDO	5/07/86	24.0	1.55	1.03
OH:TOLEDO	5/16/86	4.0	0.17	0.14
OH:TOLEDO	5/17/86	7.5	0.17	0.31
OH:TOLEDO	5/18/86	2.0	0.06	0.08
OH:TOLEDO	5/19/86	16.0	0.45	0.60
OH:TOLEDO	5/20/86	3.0	0.18	0.14
OH:TOLEDO	5/22/86	3.5	0.29	0.15
OH:TOLEDO	5/27/86	6.0	0.08	0.25
OH:TOLEDO	5/28/86	8.0	0.15	0.34

TABLE 6 (CONTINUED)

GROSS BETA CONCENTRATION IN PRECIPITATION

MAY 1986

LOCATION	DATE	DEPTH (mm)	ACT. (nCi/m^2)	$\pm$ 2s
OK:OKLAHOMA CITY	5/09/86	2.2	0.02	0.08
OK:OKLAHOMA CITY	5/12/86	21.0	0.67	0.90
OK:OKLAHOMA CITY	5/15/86	48.0	0.48	1.51
OK:OKLAHOMA CITY	5/17/86	40.8	-0.16	1.48
OK:OKLAHOMA CITY	5/19/86	0.6	0.01	0.02
OK:OKLAHOMA CITY	5/25/86	2.0	0.12	0.07
OK:OKLAHOMA CITY	5/27/86	6.0	0.28	0.23
OR:PORTLAND	5/05/86	0.3	0.01	0.01
OR:PORTLAND	5/05/86	0.3	0.02	0.01
OR:PORTLAND	5/05/86	9.8	0.22	0.53
OR:PORTLAND	5/08/86	0.9	0.04	0.04
OR:PORTLAND	5/09/86	8.0	1.37	0.43
OR:PORTLAND	5/09/86	0.3	0.30	0.03
OR:PORTLAND	5/10/86	6.4	0.77	0.32
OR:PORTLAND	5/11/86	5.8	0.36	0.26
OR:PORTLAND	5/13/86	2.8	0.34	0.17
PA:HARRISBURG	5/07/86	4.0	0.10	0.14
PA:HARRISBURG	5/09/86	0.6	0.03	0.02
PA:HARRISBURG	5/17/86	17.8	1.00	0.75
PA:HARRISBURG	5/22/86	2.0	0.09	0.08
PA:MIDDLETOWN	5/07/86	11.5	0.27	0.46
PA:MIDDLETOWN	5/09/86	0.4	0.01	0.02
PA:MIDDLETOWN	5/19/86	8.2	0.40	0.28
PA:MIDDLETOWN	5/20/86	3.2	0.13	0.12
PA:MIDDLETOWN	5/21/86	33.2	2.06	1.36
PA:MIDDLETOWN	5/22/86	10.2	-0.07	0.52
PA:PITTSBURGH	5/07/86	13.0	1.09	0.58
PA:PITTSBURGH	5/14/86	1.4	0.05	0.05
PA:PITTSBURGH	5/15/86	3.0	0.15	0.13
PA:PITTSBURGH	5/20/86	9.8	0.38	0.39
PA:PITTSBURGH	5/21/86	4.3	0.53	0.19
RI:PROVIDENCE	5/06/86	3.0	0.06	0.12
RI:PROVIDENCE	5/22/86	36.0	1.34	1.53
RI:PROVIDENCE	5/23/86	5.0	0.04	0.19
RI:PROVIDENCE	5/27/86	10.0	0.13	0.41
SC:COLUMBIA	5/09/86	4.8	0.24	0.20
SC:COLUMBIA	5/14/86	8.2	0.48	0.36
SC:COLUMBIA	5/20/86	4.0	0.18	0.14
SC:COLUMBIA	5/27/86	14.0	-0.22	0.66
SC:COLUMBIA	5/28/86	10.0	0.50	0.44

TABLE 6 (CONTINUED)

GROSS BETA CONCENTRATION IN PRECIPITATION

MAY 1986

LOCATION	DATE	DEPTH (mm)	ACT. (nCi/m^2)	$\pm$ 2s
SD:PIERRE	5/07/86	1.5	0.00	0.00
SD:PIERRE	5/08/86	5.2	0.10	0.19
SD:PIERRE	5/09/86	28.0	0.62	1.51
SD:PIERRE	5/10/86	3.5	0.08	0.14
SD:PIERRE	5/23/86	39.5	5.78	2.39
SD:PIERRE	5/26/86	8.0	0.26	0.33
SD:PIERRE	5/27/86	0.3	0.02	0.01
TN:KNOXVILLE	5/08/86	1.0	0.02	0.04
TN:KNOXVILLE	5/14/86	4.0	-0.02	0.14
TN:KNOXVILLE	5/20/86	6.0	0.20	0.25
TN:KNOXVILLE	5/23/86	2.1	0.06	0.08
TN:KNOXVILLE	5/27/86	37.0	1.37	1.40
TN:NASHVILLE	5/11/86	0.2	0.01	0.01
TN:NASHVILLE	5/12/86	0.4	0.01	0.02
TN:NASHVILLE	5/19/86	8.0	-0.01	0.30
TN:NASHVILLE	5/23/86	2.0	0.27	0.10
TN:NASHVILLE	5/25/86	1.7	0.02	0.09
TN:NASHVILLE	5/26/86	6.0	0.22	0.24
TN:NASHVILLE	5/27/86	2.0	0.01	0.10
TN:NASHVILLE	5/28/86	1.9	0.11	0.08
TX:AUSTIN	5/05/86	4.0	0.07	0.15
TX:AUSTIN	5/08/86	0.4	0.03	0.02
TX:AUSTIN	5/09/86	0.4	0.00	0.02
TX:AUSTIN	5/10/86	64.0	0.00	0.00
TX:AUSTIN	5/11/86	1.0	0.02	0.04
TX:AUSTIN	5/14/86	8.0	0.10	0.30
TX:AUSTIN	5/17/86	4.0	0.10	0.15
TX:AUSTIN	5/25/86	4.0	0.02	0.16
TX:AUSTIN	5/28/86	2.0	0.01	0.10
UT:SALT LAKE CITY	5/07/86	0.7	0.02	0.03
UT:SALT LAKE CITY	5/08/86	19.4	0.60	1.00
UT:SALT LAKE CITY	5/09/86	18.4	4.35	1.10
UT:SALT LAKE CITY	5/10/86	8.8	0.05	0.44
UT:SALT LAKE CITY	5/11/86	0.6	0.57	0.05
UT:SALT LAKE CITY	5/16/86	0.6	0.46	0.05
UT:SALT LAKE CITY	5/22/86	7.0	1.55	0.37
VA:LYNCHBURG	5/06/86	20.6	0.30	0.73
VA:LYNCHBURG	5/15/86	33.4	4.95	1.71
VA:LYNCHBURG	5/20/86	18.0	0.63	0.72

TABLE 6 (CONTINUED)

GROSS BETA CONCENTRATION IN PRECIPITATION

MAY 1986

LOCATION	DATE	DEPTH (mm)	ACT. (nCi/m^2)	± 2s
VA:VIRGINIA BEACH	5/13/86	1.0	0.09	0.04
VA:VIRGINIA BEACH	5/23/86	2.2	0.21	0.10
VT:MONTPELIER	5/05/86	2.0	0.02	0.08
VT:MONTPELIER	5/06/86	8.0	0.05	0.33
VT:MONTPELIER	5/07/86	0.4	0.01	0.02
VT:MONTPELIER	5/08/86	7.0	0.20	0.30
VT:MONTPELIER	5/09/86	4.0	0.09	0.20
VT:MONTPELIER	5/11/86	7.4	6.59	0.68
VT:MONTPELIER	5/12/86	2.0	1.10	0.15
VT:MONTPELIER	5/17/86	8.0	0.24	0.31
VT:MONTPELIER	5/19/86	4.0	0.31	0.18
VT:MONTPELIER	5/20/86	16.0	0.51	0.61
VT:MONTPELIER	5/21/86	3.5	0.16	0.15
VT:MONTPELIER	5/22/86	12.0	0.25	0.49
VT:MONTPELIER	5/23/86	3.0	0.05	0.11
WA:OLYMPIA	5/05/86	0.3	0.03	0.02
WA:OLYMPIA	5/06/86	1.0	0.04	0.04
WA:OLYMPIA	5/08/86	0.7	0.10	0.04
WA:OLYMPIA	5/11/86	0.3	0.21	0.02
WA:OLYMPIA	5/12/86	2.0	0.75	0.13
WA:OLYMPIA	5/13/86	20.0	2.18	0.98
WA:OLYMPIA	5/14/86	1.1	0.05	0.04
WA:OLYMPIA	5/20/86	20.0	1.43	0.82
WA:SPOKANE	5/08/86	0.6	0.05	0.03
WA:SPOKANE	5/12/86	0.9	3.02	0.15
WA:SPOKANE	5/14/86	0.4	0.40	0.04
WA:SPOKANE	5/18/86	1.5	0.74	0.11
WA:SPOKANE	5/21/86	2.0	0.51	0.14
WA:SPOKANE	5/22/86	2.0	0.27	0.10
WI:MADISON	5/14/86	19.4	0.82	0.74
WI:MADISON	5/16/86	17.4	0.47	0.74
WI:MADISON	5/19/86	31.6	0.57	1.07
WI:MADISON	5/27/86	4.0	0.19	0.16

TABLE 6 (CONTINUED)

GROSS BETA CONCENTRATION IN PRECIPITATION

MAY 1986

LOCATION	DATE	DEPTH (mm)	ACT. ± 2s (nCi/m^2)	
WV:CHARLESTON	5/07/86	0.4	0.02	0.02
WV:CHARLESTON	5/14/86	40.0	1.52	1.67
WV:CHARLESTON	5/16/86	5.0	0.11	0.25
WV:CHARLESTON	5/18/86	5.0	0.20	0.22
WV:CHARLESTON	5/19/86	20.0	0.51	0.73
WV:CHARLESTON	5/20/86	2.0	0.09	0.07
WV:CHARLESTON	5/20/86	8.0	-0.10	0.41
WV:CHARLESTON	5/27/86	11.0	0.30	0.41
WY:CHEYENNE	5/08/86	0.2	0.00	0.01
WY:CHEYENNE	5/09/86	2.0	0.18	0.09
WY:CHEYENNE	5/09/86	2.0	0.17	0.09
WY:CHEYENNE	5/10/86	1.1	0.03	0.04
WY:CHEYENNE	5/13/86	1.5	1.67	0.15
WY:CHEYENNE	5/15/86	0.4	0.75	0.05
WY:CHEYENNE	5/16/86	9.0	6.26	0.91
WY:CHEYENNE	5/27/86	1.5	0.19	0.07
WY:CHEYENNE	5/29/86	1.9	0.17	0.08
WY:JACKSON	5/07/86	1.6	0.05	0.04

s = SIGMA COUNTING ERROR

TABLE 7

GROSS BETA CONCENTRATION IN PRECIPITATION

JUNE 1986

LOCATION	DEPTH (mm)	ACT. ± 2s (nCi/m^2)	
AL:DOTHAN	1.0	0.01	0.00
AL:MONTGOMERY	21.0	0.15	0.02
CT:HARTFORD	85.0	0.54	0.07
DE:WILMINGTON	47.0	0.25	0.04
FL:JACKSONVILLE	178.6	0.39	0.10
FL:MIAMI	170.6	0.13	0.08
GA:ATLANTA	5.0	0.06	0.01
IA:IOWA CITY	30.0	0.13	0.02
IL:CHICAGO	110.0	0.31	0.06
IN:INDIANAPOLIS	46.0	0.08	0.02
KS:TOPEKA	5.0	0.01	0.00
ME:AUGUSTA	33.0	0.27	0.03
MI:LANSING	236.8	0.53	0.13
MN:MINNEAPOLIS	70.0	0.44	0.06
MO:JEFFERSON CITY	12.0	0.05	0.01
MS:JACKSON	47.4	0.15	0.03
NC:CHARLOTTE	6.0	0.06	0.01
NC:WILMINGTON	169.0	0.40	0.11
NH:CONCORD	130.2	0.88	0.11
NJ:TRENTON	19.4	0.14	0.02
NY:ALBANY	94.4	0.49	0.07
NY:NEW YORK CITY	28.0	0.16	0.02
NY:NIAGARA FALLS	74.0	0.39	0.06
NY:SYRACUSE	188.5	0.46	0.11
NY:YAPHANK	34.0	0.12	0.02
OH:COLUMBUS	101.0	0.21	0.05
OH:PAINESVILLE	156.0	0.55	0.10
OH:TOLEDO	184.0	0.39	0.10
PA:HARRISBURG	47.2	0.34	0.04
PA:MIDDLETOWN	80.0	0.23	0.05
PA:PITTSBURGH	81.8	0.37	0.06
RI:PROVIDENCE	101.0	1.10	0.10
SC:BARNWELL	23.4	0.04	0.01
SC:COLUMBIA	54.0	0.31	0.04
SD:PIERRE	56.0	0.21	0.04
TN:KNOXVILLE	10.6	0.05	0.01
TN:NASHVILLE	71.8	0.26	0.05
VA:LYNCHBURG	7.0	0.10	0.01

TABLE 7 (CONTINUED)

GROSS BETA CONCENTRATION IN PRECIPITATION

JUNE 1986

LOCATION	DEPTH (mm)	ACT. ± 2s (nCi/m^2)	
VA:VIRGINIA BEACH	5.0	0.02	0.00
VT:MONTPELIER	20.0	0.37	0.03
WI:MADISON	52.6	0.09	0.03
WV:CHARLESTON	38.6	0.25	0.03

s = SIGMA COUNTING ERROR

TABLE 8

PRECIPITATION
TRITIUM CONCENTRATION

APRIL - JUNE 1986

LOCATION	APRIL nCi/l ± 2s	MAY nCi/l ± 2s	JUNE nCi/l ± 2s
AL:DOTHAN	NS	*	0.2 0.2
AL:MONTGOMERY	0.2 0.2	*	0.2 0.2
AR:LITTLE ROCK	0.1 0.2	*	0.1 0.2
CA:BERKELEY	0.2 0.2	*	NS
CO:DENVER	0.2 0.2	*	0.2 0.2
CT:HARTFORD	0.1 0.2	*	0.2 0.2
DE:WILMINGTON	NS	*	0.2 0.2
FL:JACKSONVILLE	0.1 0.2	*	0.1 0.2
FL:MIAMI	0.1 0.2	*	0.2 0.2
GA:ATLANTA	NS	*	0.2 0.2
HI:HONOLULU	NS	*	0.1 0.2
IA:IOWA CITY	NS	*	0.2 0.2
ID:BOISE	0.2 0.2	*	0.2 0.2
ID:IDAHO FALLS	0.1 0.2	*	NS
IL:CHICAGO	0.3 0.2	*	0.2 0.2
IN:INDIANAPOLIS	NS	*	0.2 0.2
KS:TOPEKA	NS	*	0.1 0.2
LA:NEW ORLEANS	NS	*	0.2 0.2
ME:AUGUSTA	NS	*	0.1 0.2
MI:LANSING	0.2 0.2	*	0.2 0.2
MN:MINNEAPOLIS	0.2 0.2	*	0.1 0.2
MO:JEFFERSON CITY	NS	*	0.2 0.2
MS:JACKSON	0.1 0.2	*	0.2 0.2
MT:HELENA	NS	*	0.2 0.2
NC:CHARLOTTE	NS	*	0.2 0.2
NC:WILMINGTON	NS	*	0.2 0.2
ND:BISMARCK	0.2 0.2	*	0.2 0.2
NH:CONCORD	0.1 0.2	*	0.2 0.2
NJ:TRENTON	0.3 0.2	*	0.2 0.2
NM:SANTA FE	NS	*	0.1 0.2
NV:LAS VEGAS	0.2 0.2	*	0.2 0.2
NY:ALBANY	NS	*	0.1 0.2
NY:NEW YORK CITY	0.4 0.2	*	0.2 0.2
NY:NIAGARA FALLS	0.2 0.2	*	0.2 0.2
NY:SYRACUSE	NS	*	

TABLE 8 (CONTINUED)

PRECIPITATION
TRITIUM CONCENTRATION

APRIL - JUNE 1986

LOCATION	APRIL nCi/l ± 2s	MAY nCi/l ± 2s	JUNE nCi/l ± 2s
NY:YAPHANK	0.2 0.2	*	0.1 0.2
OH:COLUMBUS	NS	*	0.2 0.2
OH:PAINESVILLE	0.1 0.2	*	0.1 0.2
OH:TOLEDO	0.3 0.2	*	0.2 0.2
OK:OKLAHOMA CITY	0.3 0.2	*	0.3 0.2
OR:PORTLAND	0.1 0.2	*	0.2 0.2
PA:HARRISBURG	NS	*	0.1 0.2
PA:MIDDLETOWN	0.2 0.2	*	0.2 0.2
PA:PITTSBURGH	NS	*	0.2 0.2
RI:PROVIDENCE	NS	*	0.2 0.2
SC:BARNWELL	2.7 0.3	*	1.1 0.2
SC:COLUMBIA	0.2 0.2	*	0.3 0.2
SD:PIERRE	NS	*	0.2 0.2
TN:KNOXVILLE	0.1 0.2	*	0.2 0.2
TN:NASHVILLE	NS	*	0.2 0.2
TX:AUSTIN	0.1 0.2	*	0.2 0.2
TX:EL PASO	NS	*	0.2 0.2
VA:LYNCHBURG	0.1 0.2	*	0.1 0.2
VA:VIRGINIA BEACH	NS	*	0.2 0.2
VT:MONTPELIER	NS	*	0.2 0.2
WA:OLYMPIA	NS	*	0.2 0.2
WI:MADISON	0.2 0.2	*	0.1 0.2
WV:CHARLESTON	NS	*	0.3 0.2
WY:CHEYENNE	NS	*	0.2 0.2

* SEE TABLE 9.1

NS = NO SAMPLE
s = SIGMA COUNTING ERROR

TABLE 9

PRECIPITATION
TRITIUM CONCENTRATION

MAY 1986

LOCATION	MAY DATE	nCi/l ± 2s	
AK:ANCHORAGE	5/11/86	0.1	0.2
AK:ANCHORAGE	5/13/86	0.1	0.2
AK:CHEFORNAK	5/13/86	0.1	0.2
AK:DUTCH HARBOR	5/ 9/86	0.3	0.2
AK:FAIRBANKS	5/15/86	0.1	0.2
AK:JUNEAU	5/ 7/86	0.2	0.2
AK:JUNEAU	5/12/86	0.4	0.2
AK:JUNEAU	5/14/86	0.1	0.2
AK:JUNEAU	5/15/86	0.1	0.2
AK:KETCHIKAN	5/11/86	0.1	0.2
AK:KODIAK	5/ 9/86	0.2	0.2
AK:KWIGILLINGOK	5/14/86	0.2	0.2
AK:NORTH POLE	5/11/86	0.3	0.2
AK:PHS HOSPITAL	5/13/86	0.1	0.2
AL:ASHFORD	5/12/86	0.3	0.2
AL:MONTGOMERY	5/11/86	0.1	0.2
AL:MONTGOMERY	5/12/86	0.4	0.2
AR:LITTLE ROCK	5/ 7/86	0.1	0.2
AR:LITTLE ROCK	5/15/86	0.2	0.2
CA:BERKELEY	5/ 4/86	0.1	0.2
CA:BERKELEY	5/ 7/86	0.1	0.2
CO:DENVER	5/ 9/86	0.2	0.2
FL:JACKSONVILLE	5/ 8/86	0.2	0.2
FL:JACKSONVILLE	5/10/86	0.1	0.2
FL:MIAMI	5/ 5/86	0.1	0.2
HI:HONOLULU	5/ 6/86	0.1	0.2
HI:HONOLULU	5/16/86	0.2	0.2
IA:IOWA CITY	5/14/86	0.1	0.2
ID:BOISE	5/ 5/86	0.2	0.2
ID:BOISE	5/ 7/86	0.1	0.2
ID:BOISE	5/10/86	0.2	0.2
ID:BOISE	5/12/86	0.1	0.2
ID:IDAHO FALLS	5/ 5/86	0.1	0.2
ID:IDAHO FALLS	5/ 6/86	0.2	0.2
ID:IDAHO FALLS	5/ 8/86	0.1	0.2
ID:IDAHO FALLS	5/ 9/86	0.2	0.2

TABLE 9 (CONTINUED)

PRECIPITATION
TRITIUM CONCENTRATION

MAY 1986

MAY

LOCATION	DATE	nCi/l ± 2s
IL:CHICAGO	5/12/86	0.1 0.2
IL:CHICAGO	5/14/86	0.1 0.2
IN:INDIANAPOLIS	5/ 7/86	0.1 0.2
IN:INDIANAPOLIS	5/14/86	0.2 0.2
IN:INDIANAPOLIS	5/16/86	0.1 0.2
KS:TOPEKA	5/ 6/86	0.1 0.2
KS:TOPEKA	5/ 7/86	0.2 0.2
KS:TOPEKA	5/13/86	0.3 0.2
KS:TOPEKA	5/15/86	0.1 0.2
KY:FRANKFORT	5/14/86	0.2 0.2
LA:NEW ORLEANS	5/12/86	0.1 0.2
LA:NEW ORLEANS	5/15/86	0.2 0.2
ME:AUGUSTA	5/ 7/86	0.3 0.2
ME:AUGUSTA	5/ 9/86	0.1 0.2
MI:LANSING	5/ 7/86	0.2 0.2
MI:LANSING	5/15/86	0.1 0.2
MI:LANSING	5/16/86	0.2 0.2
MN:MINNEAPOLIS	5/ 8/86	0.3 0.2
MN:MINNEAPOLIS	5/11/86	0.3 0.2
MN:MINNEAPOLIS	5/13/86	0.3 0.2
MN:MINNEAPOLIS	5/14/86	0.2 0.2
MO:JEFFERSON CITY	5/13/86	0.2 0.2
MO:JEFFERSON CITY	5/14/86	0.2 0.2
MS:JACKSON	5/12/86	0.1 0.2
MT:HELENA	5/ 9/86	0.1 0.2
MT:HELENA	5/12/86	0.2 0.2
MT:HELENA	5/14/86	0.1 0.2
ND:BISMARCK	5/ 5/86	0.2 0.2
ND:BISMARCK	5/ 6/86	0.2 0.2
ND:BISMARCK	5/16/86	0.2 0.2
NE:LINCOLN	5/10/86	0.1 0.2
NE:LINCOLN	5/15/86	0.1 0.2
NE:SCOTTSBLUFF	5/10/86	0.1 0.2
NH:CONCORD	5/ 6/86	0.2 0.2
NH:CONCORD	5/ 9/86	0.1 0.2
NH:CONCORD	5/13/86	0.3 0.2

TABLE 9 (CONTINUED)

PRECIPITATION
TRITIUM CONCENTRATION

MAY 1986

MAY

LOCATION	DATE	nCi/l ± 2s	
NM:SANTA FE	5/ 9/86	0.1	0.2
NM:SANTA FE	5/ 9/86	0.2	0.2
NV:LAS VEGAS	5/ 7/86	0.4	0.2
NY:ALBANY	5/ 7/86	0.2	0.2
NY:ALBANY	5/ 9/86	0.2	0.2
NY:NEW YORK CITY	5/ 9/86	0.1	0.2
NY:NEW YORK CITY	5/15/86	0.1	0.2
NY:NIAGARA FALLS	5/ 7/86	0.1	0.2
NY:NIAGARA FALLS	5/16/86	0.4	0.2
NY:SYRACUSE	5/ 5/86	0.2	0.2
OH:COLUMBUS	5/ 7/86	0.2	0.2
OH:COLUMBUS	5/13/86	0.3	0.2
OH:COLUMBUS	5/15/86	0.3	0.2
OH:COLUMBUS	5/16/86	0.1	0.2
OH:PAINESVILLE	5/ 7/86	0.2	0.2
OH:PAINESVILLE	5/16/86	0.3	0.2
OH:TOLEDO	5/ 7/86	0.1	0.2
OH:TOLEDO	5/16/86	0.2	0.2
OK:OKLAHOMA CITY	5/15/86	0.1	0.2
OR:PORTLAND	5/ 2/86	0.2	0.2
OR:PORTLAND	5/ 5/86	0.2	0.2
OR:PORTLAND	5/ 5/86	0.1	0.2
OR:PORTLAND	5/ 9/86	0.3	0.2
OR:PORTLAND	5/10/86	0.2	0.2
OR:PORTLAND	5/11/86	0.2	0.2
OR:PORTLAND	5/12/86	0.3	0.2
OR:PORTLAND	5/13/86	0.2	0.2
PA:HARRISBURG	5/ 7/86	0.2	0.2
PA:MIDDLETOWN	5/ 7/86	0.2	0.2
RI:PROVIDENCE	5/ 6/86	0.1	0.2
SD:PIERRE	5/ 7/86	0.2	0.2
TN:KNOXVILLE	5/ 8/86	0.3	0.2
TN:NASHVILLE	5/11/86	0.1	0.2
UT:SALT LAKE CITY	5/ 7/86	0.2	0.2
UT:SALT LAKE CITY	5/ 9/86	0.1	0.2
UT:SALT LAKE CITY	5/10/86	0.1	0.2
UT:SALT LAKE CITY	5/11/86	0.1	0.2
UT:SALT LAKE CITY	5/16/86	0.2	0.2

TABLE 9 (CONTINUED)

PRECIPITATION
TRITIUM CONCENTRATION

MAY 1986

MAY

LOCATION	DATE	nCi/l ± 2s
VA:LYNCHBURG	5/15/86	0.2 0.2
VA:VIRGINIA BEACH	5/13/86	0.2 0.2
VT:MONTPELIER	5/ 5/86	0.2 0.2
VT:MONTPELIER	5/ 6/86	0.2 0.2
VT:MONTPELIER	5/ 7/86	0.2 0.2
VT:MONTPELIER	5/ 7/86	0.2 0.2
VT:MONTPELIER	5/11/86	0.1 0.2
VT:MONTPELIER	5/12/86	0.1 0.2
WA:OLYMPIA	5/ 5/86	0.1 0.2
WA:OLYMPIA	5/ 6/86	0.1 0.2
WA:OLYMPIA	5/ 8/86	0.1 0.2
WA:OLYMPIA	5/11/86	0.1 0.2
WA:OLYMPIA	5/12/86	0.1 0.2
WA:OLYMPIA	5/13/86	0.2 0.2
WA:SPOKANE	5/12/86	0.2 0.2
WA:SPOKANE	5/14/86	0.1 0.2
WI:MADISON	5/ 6/86	0.2 0.2
WY:CHEYENNE	5/ 9/86	0.1 0.2
WY:CHEYENNE	5/13/86	0.3 0.2
WY:CHEYENNE	5/15/86	0.3 0.2

s = SIGMA COUNTING ERROR

TABLE 9.1

PRECIPITATION

GAMMA RESULTS

LOCATION	DATE	131I	±2s	106RU	±2s	137CS	±2s
		pCi/l		pCi/l		pCi/l	
AK:ANCHORAGE	5/11/86	370.	178.	ND		ND	
AK:ANCHORAGE	5/13/86	58.	21.	ND		ND	
AK:BETHEL	5/13/86	62.	16.	ND		ND	
AK:CHEFORNAK	5/13/86	380.	68.	ND		27.	19.
AK:DILLINGHAM	5/14/86	300.	39.	ND		ND	
AK:DUTCH HARBOR	5/ 9/86	470.	71.	ND		ND	
AK:FAIRBANKS	5/15/86	1250.	314.	ND		ND	
AK:JUNEAU	5/12/86	50.	29.	ND		68.	31.
AK:JUNEAU	5/14/86	120.	25.	ND		24.	17.
AK:JUNEAU	5/15/86	150.	57.	ND		24.	23.
AK:KETCHIKAN	5/11/86	340.	211.	ND		ND	
AK:KODIAK	5/ 9/86	200.	56.	ND		ND	
AK:KWIGILLINGOK	5/14/86	340.	68.	ND		ND	
AK:NORTH POLE	5/11/86	600.	48.	ND		ND	
AK:PHS HOSPITAL	5/13/86	170.	36.	ND		ND	
AK:PHS HOSPITAL	5/13/86	140.	14.	ND		ND	
AL:ASHFORD	5/12/86	288.	141.	ND		ND	
AL:MONTGOMERY	5/11/86	73.	13.	ND		ND	
AL:MONTGOMERY	5/12/86	58.	31.	ND		ND	
AL:MONTGOMERY	5/18/86	37.	6.	ND		ND	
AL:MONTGOMERY	5/27/86	20.	7.	ND		ND	
AR:LITTLE ROCK	5/ 1/86	-3.	13.	19.	40.	-3.	8.
AR:LITTLE ROCK	5/ 1/86	1.	13.	-7.	40.	5.	8.
AR:LITTLE ROCK	5/15/86	29.	21.	ND		ND	
AR:LITTLE ROCK	5/19/86	39.	14.	ND		ND	
CA:BERKELEY	5/ 3/86	4.	13.	18.	41.	-3.	8.
CO:DENVER	5/ 9/86	83.	95.	ND		ND	
CO:DENVER	5/20/86	480.	58.	ND		19.	17.
CT:HARTFORD	5/17/86	53.	20.	ND		ND	
CT:HARTFORD	5/22/86	22.	15.	ND		ND	
DE:WILMINGTON	5/21/86	24.	24.	ND		ND	
FL:JACKSONVILLE	5/10/86	30.	0.	ND		ND	
FL:JACKSONVILLE	5/21/86	25.	21.	ND		ND	
FL:MIAMI	5/16/86	45.	18.	ND		ND	
HI:HONOLULU	5/16/86	120.	66.	ND		ND	
IA:IOWA CITY	5/ 1/86	-12.	14.	23.	42.	-6.	8.
IA:IOWA CITY	5/14/86	99.	33.	ND		ND	
IA:IOWA CITY	5/28/86	22.	15.	ND		ND	
IA:IOWA CITY	5/29/86	16.	6.	ND		ND	
ID:BOISE	5/ 7/86	36.	26.	ND		ND	
ID:BOISE	5/10/86	900.	90.	ND		ND	
ID:BOISE	5/10/86	1680.	67.	ND		63.	32.
ID:BOISE	5/12/86	1150.	104.	ND		120.	54.

TABLE 9.1 (CONTINUED)

PRECIPITATION

GAMMA RESULTS

LOCATION	DATE	131I ±2s	106RU ±2s	137CS ±2s
		pCi/l	pCi/l	pCi/l
ID:IDAHO FALLS	5/ 1/86	5. 17.	13. 53.	3. 10.
ID:IDAHO FALLS	5/ 6/86	78. 38.	ND	ND
ID:IDAHO FALLS	5/ 6/86	88. 83.	ND	ND
ID:IDAHO FALLS	5/ 6/86	120. 109.	ND	ND
ID:IDAHO FALLS	5/ 7/86	66. 42.	ND	ND
ID:IDAHO FALLS	5/ 8/86	120. 26.	ND	ND
ID:IDAHO FALLS	5/ 9/86	27. 18.	ND	ND
ID:IDAHO FALLS	5/10/86	1980. 158.	ND	ND *
ID:IDAHO FALLS	5/11/86	750. 53.	ND	ND
ID:IDAHO FALLS	5/16/86	2630. 184.	ND	70. 40.
ID:IDAHO FALLS	5/16/86	2290. 412.	ND	ND
ID:IDAHO FALLS	5/22/86	110. 26.	ND	20. 15.
IL:CHICAGO	5/12/86	47. 17.	ND	ND
IL:CHICAGO	5/14/86	39. 14.	ND	ND
IL:CHICAGO	5/18/86	17. 12.	ND	ND
IL:CHICAGO	5/29/86	17. 13.	ND	ND
IN:INDIANAPOLIS	5/ 1/86	-4. 14.	59. 41.	-5. 8.
IN:INDIANAPOLIS	5/ 1/86	3. 13.	39. 42.	-5. 8.
IN:INDIANAPOLIS	5/14/86	50. 16.	ND	ND
IN:INDIANAPOLIS	5/16/86	34. 14.	ND	ND
IN:INDIANAPOLIS	5/19/86	28. 19.	ND	ND
IS:MARIANA	5/14/86	92. 38.	ND	ND
KS:TOPEKA	5/13/86	43. 18.	ND	ND
KS:TOPEKA	5/15/86	57. 16.	ND	ND
KS:TOPEKA	5/17/86	28. 15.	ND	ND
KS:TOPEKA	5/30/86	18. 13.	ND	ND
KY:FRANKFORT	5/13/86	88. 44.	ND	ND
KY:FRANKFORT	5/14/86	43. 17.	ND	ND
KY:FRANKFORT	5/20/86	89. 90.	ND	ND
LA:NEW ORLEANS	5/12/86	50. 24.	ND	ND
LA:NEW ORLEANS	5/15/86	89. 23.	ND	ND
ME:AUGUSTA	5/ 8/86	72. 21.	ND	ND
ME:AUGUSTA	5/ 9/86	89. 50.	ND	ND
ME:AUGUSTA	5/17/86	76. 24.	ND	ND
ME:AUGUSTA	5/20/86	23. 13.	ND	ND
ME:AUGUSTA	5/27/86	17. 7.	ND	ND
ME:AUGUSTA	5/28/86	ND	ND	29. 24.
ME:AUGUSTA	5/30/86	42. 19.	ND	ND
MI:LANSING	5/ 7/86	40. 15.	ND	ND
MI:LANSING	5/15/86	40. 17.	ND	ND
MI:LANSING	5/16/86	43. 17.	ND	ND
MI:LANSING	5/19/86	36. 14.	ND	ND
MI:LANSING	5/21/86	25. 14.	ND	ND
MI:LANSING	5/22/86	200. 48.	ND	ND
MI:LANSING	5/23/86	140. 109.	ND	ND

* Also detected in this sample: 140BA 32. ± 26.

TABLE 9.1 (CONTINUED)

PRECIPITATION

GAMMA RESULTS

LOCATION	DATE	131I	±2s	106RU	±2s	137CS	±2s
		pCi/l		pCi/l		pCi/l	
MN:MINNEAPOLIS	5/11/86	8.	5.	ND		ND	
MN:MINNEAPOLIS	5/13/86	180.	31.	ND		ND	
MN:MINNEAPOLIS	5/14/86	330.	69.	ND		ND	
MN:MINNEAPOLIS	5/24/86	260.	86.	ND		ND	
MN:MINNEAPOLIS	5/25/86	93.	32.	ND		ND	
MN:MINNEAPOLIS	5/26/86	29.	10.	58.	56.	ND	
MO:JEFFERSON CITY	5/13/86	74.	21.	ND		ND	
MO:JEFFERSON CITY	5/14/86	210.	53.	ND		ND	
MO:JEFFERSON CITY	5/16/86	54.	19.	ND		ND	
MO:JEFFERSON CITY	5/18/86	36.	15.	ND		ND	
MO:JEFFERSON CITY	5/26/86	46.	17.	ND		ND	
MO:JEFFERSON CITY	5/27/86	44.	19.	ND		ND	
MS:JACKSON	5/12/86	35.	28.	ND		ND	
MT:HELENA	5/ 8/86	27.	14.	ND		ND	
MT:HELENA	5/ 9/86	36.	31.	ND		ND	
MT:HELENA	5/12/86	650.	52.	ND		ND	
MT:HELENA	5/14/86	570.	40.	ND		ND	
MT:HELENA	5/21/86	390.	47.	ND		23.	19.
ND:BISMARCK	5/ 6/86	7.	5.	ND		ND	
ND:BISMARCK	5/12/86	560.	39.	ND		ND	
ND:BISMARCK	5/16/86	440.	172.	ND		ND	
ND:BISMARCK	5/19/86	800.	184.	ND		ND	
ND:BISMARCK	5/19/86	740.	171.	ND		ND	
ND:BISMARCK	5/23/86	72.	18.	ND		ND	
ND:BISMARCK	5/24/86	40.	16.	ND		ND	
ND:BISMARCK	5/25/86	49.	29.	ND		ND	
ND:BISMARCK	5/26/86	86.	28.	ND		ND	
NE:LINCOLN	5/10/86	630.	353.	ND		ND	
NE:LINCOLN	5/15/86	830.	241.	ND		ND	
NE:LINCOLN	5/16/86	120.	41.	ND		ND	
NE:LINCOLN	5/17/86	75.	38.	ND		17.	11.
NE:LINCOLN	5/28/86	31.	15.	ND		ND	
NE:SCOTTSBLUFF	5/10/86	82.	25.	ND		ND	
NH:CONCORD	5/ 6/86	9.	28.	103.	85.	-18.	23.
NH:CONCORD	5/ 8/86	63.	47.	ND		ND	
NH:CONCORD	5/ 9/86	33.	17.	ND		ND	
NH:CONCORD	5/13/86	267.	102.	ND		ND	
NH:CONCORD	5/17/86	160.	40.	ND		ND	
NH:CONCORD	5/22/86	13.	6.	ND		ND	
NH:CONCORD	5/24/86	29.	18.	ND		12.	11.
NH:CONCORD	5/25/86	19.	16.	ND		ND	
NH:CONCORD	5/28/86	80.	29.	ND		ND	

TABLE 9.1 (CONTINUED)

PRECIPITATION

GAMMA RESULTS

LOCATION	DATE	131I	±2s	106RU	±2s	137CS	±2s
		pCi/l		pCi/l		pCi/l	
NM:SANTA FE	5/ 9/86	200.	62.	ND		ND	
NM:SANTA FE	5/ 9/86	360.	36.	ND		18.	8.
NM:SANTA FE	5/17/86	140.	48.	ND		ND	
NM:SANTA FE	5/28/86	28.	24.	ND		ND	
NV:LAS VEGAS	5/ 7/86	530.	175.	ND		ND	
NY:ALBANY	5/ 9/86	94.	31.	ND		ND	
NY:ALBANY	5/21/86	31.	16.	ND		ND	
NY:ALBANY	5/27/86	16.	12.	ND		ND	
NY:NEW YORK CITY	5/ 9/86	100.	33.	ND		ND	
NY:NEW YORK CITY	5/15/86	200.	26.	ND		ND	
NY:NEW YORK CITY	5/19/86	94.	18.	ND		8.	5.
NY:NEW YORK CITY	5/22/86	17.	16.	ND		ND	
NY:NIAGARA FALLS	5/16/86	51.	31.	ND		ND	
NY:NIAGARA FALLS	5/20/86	-3.	18.	50.	54.	-6.	11.
NY:NIAGARA FALLS	5/20/86	14.	11.	ND		ND	
NY:NIAGARA FALLS	5/23/86	38.	16.	ND		ND	
NY:SYRACUSE	5/16/86	70.	20.	ND		ND	
NY:SYRACUSE	5/20/86	14.	13.	ND		ND	
NY:SYRACUSE	5/22/86	25.	18.	ND		ND	
NY:SYRACUSE	5/27/86	56.	30.	ND		ND	
NY:YAPHANK	5/23/86	30.	17.	ND		ND	
OH:COLUMBUS	5/13/86	150.	26.	ND		ND	
OH:COLUMBUS	5/15/86	100.	34.	ND		ND	
OH:COLUMBUS	5/16/86	58.	20.	ND		ND	
OH:COLUMBUS	5/19/86	22.	17.	ND		ND	
OH:COLUMBUS	5/23/86	260.	57.	ND		ND	
OH:PAINESVILLE	5/ 7/86	12.	12.	ND		ND	
OH:PAINESVILLE	5/ 7/86	11.	5.	ND		ND	
OH:PAINESVILLE	5/16/86	38.	24.	ND		ND	
OH:PAINESVILLE	5/21/86	19.	13.	ND		ND	
OH:TOLEDO	5/ 1/86	2.	14.	15.	41.	-3.	8.
OH:TOLEDO	5/16/86	83.	31.	ND		ND	
OH:TOLEDO	5/17/86	31.	16.	ND		ND	
OH:TOLEDO	5/20/86	21.	12.	ND		ND	
OH:TOLEDO	5/22/86	85.	21.	ND		ND	
OH:TOLEDO	5/27/86	8.	8.	ND		ND	
OK:OKLAHOMA CITY	5/12/86	54.	28.	ND		ND	
OK:OKLAHOMA CITY	5/15/86	29.	20.	ND		ND	
OR:PORTLAND	5/ 5/86	46.	23.	ND		ND	
OR:PORTLAND	5/ 5/86	460.	308.	ND		ND	
OR:PORTLAND	5/ 8/86	240.	178.	ND		ND	
OR:PORTLAND	5/ 9/86	2400.	360.	ND		ND	
OR:PORTLAND	5/ 9/86	360.	94.	ND		ND	
OR:PORTLAND	5/10/86	260.	60.	ND		ND	
OR:PORTLAND	5/11/86	130.	25.	ND		16.	11.
OR:PORTLAND	5/12/86	260.	36.	45.	15.	ND	
OR:PORTLAND	5/13/86	97.	26.	ND		ND	
OR:PORTLAND	5/19/86	160.	53.	ND		13.	6.
OR:PORTLAND	5/22/86	ND		ND		35.	22.

TABLE 9.1 (CONTINUED)

PRECIPITATION

GAMMA RESULTS

LOCATION	DATE	131I	±2s	106RU	±2s	137CS	±2s
		pCi/l		pCi/l		pCi/l	
PA:HARRISBURG	5/17/86	32.	13.	ND		ND	
PA:HARRISBURG	5/20/86	20.	8.	ND		7.	5.
PA:HARRISBURG	5/20/86	19.	7.	ND		7.	5.
PA:HARRISBURG	5/22/86	33.	26.	ND		ND	
PA:MIDDLETOWN	5/19/86	29.	9.	ND		ND	
PA:MIDDLETOWN	5/20/86	38.	19.	ND		ND	
PA:PITTSBURGH	5/14/86	57.	23.	ND		ND	
PA:PITTSBURGH	5/15/86	44.	19.	ND		ND	
PA:PITTSBURGH	5/20/86	30.	16.	ND		ND	
RI:PROVIDENCE	5/23/86	16.	11.	ND		ND	
RI:PROVIDENCE	5/27/86	23.	16.	ND		ND	
SC:COLUMBIA	5/20/86	29.	13.	ND		ND	
SC:COLUMBIA	5/27/86	22.	13.	ND		ND	
SD:PIERRE	5/ 7/86	39.	41.	ND		ND	
SD:PIERRE	5/10/86	30.	14.	ND		ND	
SD:PIERRE	5/23/86	75.	23.	ND		ND	
SD:PIERRE	5/26/86	34.	16.	ND		ND	
TN:KNOXVILLE	5/20/86	39.	14.	ND		ND	
TN:KNOXVILLE	5/20/86	39.	14.	ND		ND	
TN:KNOXVILLE	5/23/86	28.	14.	ND		ND	
TN:KNOXVILLE	5/27/86	19.	21.	ND		ND	
TN:NASHVILLE	5/11/86	87.	52.	ND		ND	
TN:NASHVILLE	5/23/86	110.	36.	ND		ND	
TN:NASHVILLE	5/25/86	19.	13.	ND		ND	
TN:NASHVILLE	5/26/86	10.	4.	ND		ND	
TX:AUSTIN	5/ 1/86	3.	13.	2.	41.	-2.	8.
TX:AUSTIN	5/17/86	15.	12.	ND		ND	
TX:AUSTIN	5/25/86	22.	9.	ND		ND	
UT:SALT LAKE CITY	5/ 8/86	36.	17.	ND		ND	
UT:SALT LAKE CITY	5/ 9/86	21.	19.	ND		ND	
UT:SALT LAKE CITY	5/10/86	17.	11.	ND		ND	
UT:SALT LAKE CITY	5/11/86	2330.	373.	ND		ND	
UT:SALT LAKE CITY	5/16/86	1030.	206.	ND		ND	
UT:SALT LAKE CITY	5/22/86	340.	34.	ND		21.	14.
VA:LYNCHBURG	5/15/86	120.	38.	ND		ND	
VA:VIRGINIA BEACH	5/13/86	180.	45.	ND		ND	
VT:MONTPELIER	5/ 7/86	120.	36.	ND		ND	
VT:MONTPELIER	5/11/86	1660.	963.	ND		62.	27.
VT:MONTPELIER	5/12/86	870.	52.	ND		62.	19.
VT:MONTPELIER	5/17/86	93.	10.	ND		6.	5.
VT:MONTPELIER	5/19/86	57.	19.	ND		13.	12.
VT:MONTPELIER	5/20/86	-1.	18.	28.	53.	-4.	11.
VT:MONTPELIER	5/23/86	14.	12.	ND		ND	

TABLE 9.1 (CONTINUED)

PRECIPITATION

GAMMA RESULTS

LOCATION	DATE	131I ±2s	106RU ±2s	137CS ±2s
		pCi/l	pCi/l	pCi/l
WA:OLYMPIA	5/ 5/86	170. 46.	ND	ND
WA:OLYMPIA	5/ 6/86	47. 25.	ND	ND
WA:OLYMPIA	5/ 6/86	27. 9.	ND	ND
WA:OLYMPIA	5/ 8/86	270. 162.	ND	ND
WA:OLYMPIA	5/11/86	1220. 256.	ND	ND
WA:OLYMPIA	5/12/86	960. 86.	ND	ND
WA:OLYMPIA	5/13/86	140. 43.	ND	ND
WA:OLYMPIA	5/14/86	71. 26.	ND	22. 17.
WA:OLYMPIA	5/19/86	220. 35.	ND	ND
WA:OLYMPIA	5/20/86	83. 31.	ND	ND
WA:SPOKANE	5/ 8/86	140. 162.	ND	ND
WA:SPOKANE	5/12/86	6620. 199.	ND	ND
WA:SPOKANE	5/14/86	2110. 401.	ND	ND
WA:SPOKANE	5/18/86	730. 88.	200. 180.	45. 27.
WA:SPOKANE	5/20/86	320. 54.	ND	73. 50.
WA:SPOKANE	5/21/86	310. 34.	ND	ND
WA:SPOKANE	5/22/86	17. 3.	ND	ND
WI:MADISON	5/16/86	36. 19.	ND	ND
WI:MADISON	5/19/86	16. 11.	ND	ND
WI:MADISON	5/27/86	29. 9.	ND	ND
WV:CHARLESTON	5/15/86	32. 18.	ND	ND
WV:CHARLESTON	5/16/86	44. 13.	ND	ND
WV:CHARLESTON	5/18/86	40. 16.	ND	ND
WV:CHARLESTON	5/19/86	24. 17.	ND	ND
WV:CHARLESTON	5/27/86	28. 15.	ND	ND
WY:CHEYENNE	5/ 9/86	230. 124.	ND	ND
WY:CHEYENNE	5/13/86	1070. 118.	ND	710. 249.
WY:CHEYENNE	5/15/86	3230. 452.	ND	ND
WY:CHEYENNE	5/16/86	410. 66.	ND	ND
WY:CHEYENNE	5/19/86	82. 23.	ND	ND
WY:CHEYENNE	5/27/86	51. 7.	ND	13. 5.
WY:CHEYENNE	5/29/86	42. 10.	ND	ND
WY:JACKSON	5/ 7/86	100. 64.	ND	ND

s = SIGMA ERROR

Plutonium and Uranium in Airborne Particulates

Environmental radiation levels of plutonium and uranium are determined by the analysis of semiannually composited samples (air filters) collected from the continuously operating airborne particulate samplers.

Concentration of the specific isotopes of plutonium-238, -239, and uranium-234, -235, and -238 are determined by alpha spectroscopy following chemical separation. The volume of air represented by the semiannual composite ranges from 25,000 to 40,000 cubic meters.

Plutonium and uranium in airborne particulates data for July - December 1985 are shown in Table 10.

The plutonium and uranium results for the locations not reported in ERD 44-45 are shown at the end of Table 10.

TABLE 10

PLUTONIUM AND URANIUM IN AIRBORNE PARTICULATES
JULY - DECEMBER 1985 COMPOSITES

LOCATION	^{238}Pu aCi/m^3 ± 2s		^{239}Pu aCi/m^3 ± 2s		^{234}U aCi/m^3 ± 2s		^{235}U aCi/m^3 ± 2s		^{238}U aCi/m^3 ± 2s	
AL:ASHFORD	0.5	0.4	0.4	0.4	16.7	2.6	0.6	0.4	15.0	2.4
AL:MONTGOMERY	0.4	0.4	0.4	0.3	14.2	2.2	0.8	0.4	11.5	1.9
AR:LITTLE ROCK	0.6	0.5	0.7	0.5	20.6	3.7	1.0	0.7	21.5	3.8
AZ:TEMPE	0.8	0.8	0.8	0.8	62.4	10.1	3.6	2.0	70.4	10.9
CA:BERKELEY	1.8	0.8	0.5	0.4	8.9	3.1	0.2	0.4	8.6	2.9
CA:LOS ANGELES	1.0	0.5	0.5	0.4	26.1	4.0	0.9	0.6	25.7	4.0
CO:DENVER	1.2	0.7	0.7	0.5	25.3	4.6	0.7	0.7	18.5	3.8
CT:HARTFORD	0.6	0.6	0.1	0.3	16.8	4.1	1.3	1.0	14.3	3.7
DE:WILMINGTON	0.2	0.3	0.3	0.2	9.9	1.6	0.3	0.2	8.4	1.4
FL:JACKSONVILLE	0.4	0.6	0.2	0.2	15.6	2.7	0.5	0.4	12.4	2.4
FL:MIAMI	0.1	0.5	0.9	0.5	16.8	2.5	0.7	0.4	14.6	2.2
HI:HONOLULU	0.5	0.3	0.3	0.2	7.7	1.5	0.2	0.2	6.3	1.3
IA:IOWA CITY	0.7	0.5	0.2	0.3	19.1	3.2	1.2	0.7	16.4	2.9
ID:BOISE	0.6	0.4	0.6	0.4	32.8	4.8	1.6	0.8	35.7	5.1
ID:IDAHO FALLS	1.4	0.8	0.8	0.6	55.6	9.8	2.5	1.5	51.5	8.4
IL:CHICAGO	0.2	0.5	1.0	0.6	24.9	4.2	0.1	0.7	22.3	3.9
IN:INDIANAPOLIS	0.5	0.7	0.1	0.2	27.9	4.9	1.6	1.0	24.4	4.5
KS:TOPEKA	0.6	0.5	0.3	0.4	24.1	3.8	1.8	0.9	25.2	3.9
ME:AUGUSTA	1.0	0.8	0.0	0.5	21.3	8.9	0.6	1.1	17.5	4.3
MI:LANSING	0.8	0.7	0.0	0.4	18.6	3.1	0.4	0.4	16.4	2.9
MN:MINNEAPOLIS	0.0	0.7	0.3	0.3	19.9	3.6	1.0	0.7	20.4	3.7
MO:JEFFERSON CITY	0.5	0.6	0.3	0.3	17.2	2.9	0.2	0.2	18.6	3.0
MS:JACKSON	0.0	0.5	0.1	0.2	24.4	3.7	0.3	0.3	24.4	3.7
NC:CHARLOTTE	0.2	0.2	0.2	0.2	14.4	2.2	0.3	0.3	13.6	2.1
NC:WILMINGTON	0.5	0.3	0.3	0.2	10.2	1.8	0.7	0.4	10.1	1.8
ND:BISMARCK	1.0	0.9	0.2	0.8	31.6	5.4	0.5	0.6	33.0	5.6
NH:CONCORD	0.8	1.3	-0.8	1.3	7.7	2.5	0.1	0.3	7.9	2.5
NJ:TRENTON	0.2	0.4	0.7	0.4	24.4	4.6	0.3	0.4	15.2	3.3
NM:SANTA FE	0.4	0.4	0.5	0.5	25.8	4.8	0.3	0.4	25.3	4.6
NV:LAS VEGAS	3.0	1.7	1.7	1.2	128.8	18.4	4.0	2.4	80.9	13.3
NY:ALBANY	0.7	0.5	0.3	0.3	29.2	6.6	1.8	1.3	22.1	5.2
NY:NEW YORK CITY	0.1	0.7	0.5	0.4	19.2	5.5	1.3	1.2	15.3	4.8
NY:NIAGARA FALLS	0.0	0.6	0.2	0.2	29.7	5.8	0.5	0.7	29.4	5.5
NY:SYRACUSE	0.3	0.7	-0.1	0.2	19.7	3.4	0.3	0.4	19.0	3.3
NY:YAPHANK	-0.1	0.3	0.1	0.2	7.5	1.3	0.3	0.2	5.8	1.1
OH:COLUMBUS	0.7	0.5	0.3	0.5	27.3	3.7	1.1	0.6	28.4	3.8
OH:PAINESVILLE	-0.1	0.3	0.3	0.3	17.0	2.6	0.6	0.4	18.4	2.6
OH:TOLEDO	0.1	0.6	0.2	0.3	27.1	4.1	1.1	0.6	24.6	3.8
OK:OKLAHOMA CITY	0.5	0.5	0.5	0.5	35.8	6.3	0.7	0.7	25.1	4.8
OR:PORTLAND	1.2	0.7	0.7	0.5	19.3	3.4	0.3	0.5	17.5	3.1
PA:GOLDSBORO	0.8	0.7	1.5	0.7	12.4	2.9	0.8	0.7	12.1	2.9

TABLE 10 (CONTINUED)

PLUTONIUM AND URANIUM IN AIRBORNE PARTICULATES
JULY - DECEMBER 1985 COMPOSITES

LOCATION	^{238}Pu aCi/m^3 ± 2s	^{239}Pu aCi/m^3 ± 2s	^{234}U aCi/m^3 ± 2s	^{235}U aCi/m^3 ± 2s	^{238}U aCi/m^3 ± 2s
PA:HARRISBURG	0.6 0.8	0.6 0.5	12.5 2.6	0.4 0.4	12.8 2.5
PA:PITTSBURGH	0.3 0.6	0.3 0.3	20.8 4.0	0.7 0.6	23.2 4.3
PA:THREE MILE ISL	1.1 0.9	0.4 0.5	9.6 2.7	0.6 0.6	10.7 2.8
RI:PROVIDENCE	1.0 0.7	0.1 0.1	17.2 3.9	0.1 0.2	13.8 3.4
SC:BARNWELL	1.1 2.1	0.4 0.6	13.4 3.0	0.1 0.4	11.6 2.8
SC:COLUMBIA	0.0 0.2	0.3 0.3	24.1 3.3	0.6 0.4	25.2 3.4
SD:PIERRE	1.2 0.9	-0.1 0.3	18.9 3.5	0.6 0.5	17.6 3.2
TN:KNOXVILLE	0.3 0.3	0.2 0.3	31.0 3.7	0.9 0.4	14.9 2.1
TN:NASHVILLE	0.4 0.5	0.4 0.4	23.1 3.5	0.6 0.5	23.2 3.5
TX:AUSTIN	0.7 0.5	0.8 0.6	27.3 4.3	0.7 0.6	19.3 3.3
TX:EL PASO	1.6 0.9	0.4 0.5	72.1 10.0	4.0 1.8	58.3 8.6
VA:LYNCHBURG	0.0 0.2	0.2 0.2	480.5 47.5	7.5 1.4	13.4 2.1
VA:VIRGINIA BEACH	0.3 0.5	0.5 0.3	14.8 2.6	0.5 0.4	15.1 2.6
WA:SPOKANE	1.3 0.9	2.6 1.4	24.0 4.7	0.5 0.6	26.1 4.9
WI:MADISON	0.2 0.4	0.5 0.4	12.4 2.4	0.6 0.4	12.1 2.3
WV:CHARLESTON	0.4 0.5	0.3 0.2	23.8 3.4	1.5 0.6	24.5 3.5
RESULTS FOR SAMPLES NOT PUBLISHED IN ERD 44-45					
CA:LOS ANGELES	0.9 0.8	0.0 0.6	23.6 6.5	1.7 1.5	25.2 6.6
OR:PORTLAND	0.1 0.3	0.3 0.2	24.5 7.6	0.8 0.6	7.3 1.9
WA:SPOKANE	-0.1 0.5	0.3 0.3	26.1 5.5	1.5 1.1	24.9 5.3

s = SIGMA COUNTING ERROR

Krypton-85

Krypton-85 is a long-lived noble gas with a half-life of 10.8 years. It is released into the atmosphere by nuclear reactor operations, fuel reprocessing, weapons tests, and research and defense related activities. Krypton-85 also occurs naturally in minor quantities primarily from the neutron capture of stable krypton-84 as well as spontaneous fission and neutron-induced fission of uranium. Monitoring of krypton-85 in the atmosphere has been conducted to identify and establish baseline levels and long-term trends.

Krypton-85 analysis began in January 1973 with sample collections and analyses being performed for 12 sampling locations. These locations were selected to provide atmospheric coverage of the United States with considerations being given to the proximity to fuel reprocessing plants, nuclear reactors, and wide geographic coverage.

Dry compressed air samples, collected at each location, are purchased from commercial air suppliers annually and shipped to the EERF where the krypton-85 is cryogenically separated and counted in a liquid scintillation system.

The last Kr-85 results were for 1976, 1977, and 1979. They were published in Environmental Radiation Data: Report 30.

ERAMS

SECTION II. Water Program

The ERAMS water program provides data on ambient radiation levels in the nation's rivers, streams, and drinking water supplies.

Surface Water

Quarterly grab samples are taken downstream from operating or future nuclear facilities at 58 stations.

Surface water samples are analyzed for tritium quarterly and specific gamma activity annually. Tritium is a primary radioactive pollutant from nuclear power plants and weapons production activities.

Tritium concentrations are determined by liquid scintillation counting of distilled samples. Gamma scans are performed annually to determine levels of gamma emitting radionuclides.

Tritium concentrations for April - June are shown in Table 11.

Results from the 1986 annual gamma analyses of surface water are shown in Table 11.1.

TABLE 11

SURFACE WATER
TRITIUM CONCENTRATION

APRIL - JUNE 1986

LOCATION	SOURCE	DATE COLLECTED	nCi/l	± 2s
AL:DECATUR	TENNESSEE RIVER	4/ 8/86	0.2	0.2
AL:GORDAN	CHATTAHOOCHEE R.	4/ 1/86	0.2	0.2
AL:SCOTTSBORO	TENNESSEE RIVER	4/ 9/86	0.3	0.2
AR:LITTLE ROCK	ARKANSAS RIVER	4/ 1/86	0.1	0.2
CA:DIABLO CANYON	PACIFIC OCEAN	4/11/86	0.2	0.2
CA:EUREKA	HUMBOLDT BAY	4/15/86	0.1	0.2
CA:SAN ONOFRE	PACIFIC OCEAN	6/19/86	0.2	0.2
CO:GREELEY	SOUTH PLATTE RIVER	4/ 8/86	0.1	0.2
CT:EAST HADDAM	CONNECTICUT RIVER	5/29/86	0.1	0.2
CT:WATERFORD	LONG ISLAND SOUND	5/29/86	0.3	0.2
FL:CRYSTAL RIVER	GULF OF MEXICO	4/ 7/86	0.2	0.2
FL:FORT PIERCE	ATLANTIC OCEAN	4/22/86	0.2	0.2
FL:HOMESTEAD	BISCAYNE BAY	4/15/86	0.1	0.2
IA:CEDAR RAPIDS	CEDAR RIVER	4/ 9/86	0.2	0.2
ID:BUHL	SNAKE RIVER	4/28/86	0.2	0.2
IL:E. MOLINE	MISSISSIPPI RIVER	5/15/86	0.2	0.2
IL:MORRIS	ILLINOIS RIVER	4/15/86	0.2	0.2
IL:ZION	LAKE MICHIGAN	5/15/86	0.2	0.2
LA:NEW ORLEANS	MISSISSIPPI RIVER	4/10/86	0.3	0.2
MA:PLYMOUTH	CAPE COD BAY	4/ 7/86	0.3	0.2
MD:CONOWINGO	SUSQUEHANNA RIVER	4/15/86	0.1	0.2
MD:LUSBY	CHESAPEAKE BAY	4/ 8/86	0.2	0.2
ME:WISCASSET	MONTSEWAY BAY	4/ 8/86	0.1	0.2
MI:BRIDGMAN	LAKE MICHIGAN	4/14/86	0.2	0.2
MI:CHARLEVOIX	LAKE MICHIGAN	4/12/86	0.2	0.2
MI:MONROE	LAKE ERIE	4/ 6/86	0.3	0.2
MI:SO. HAVEN	LAKE MICHIGAN	4/14/86	0.3	0.2
MN:MONTICELLO	MISSISSIPPI RIVER	4/ 9/86	0.3	0.2
MN:RED WING	MISSISSIPPI RIVER	5/20/86	0.2	0.2
MS:PORT GIBSON	MISSISSIPPI RIVER	4/17/86	0.3	0.2
NC:CHARLOTTE	CATAWBA RIVER	4/ 7/86	0.4	0.2
NC:SOUTHPORT	ATLANTIC OCEAN	4/11/86	0.2	0.2
NE:RULO	MISSOURI RIVER	4/15/86	0.2	0.2
NJ:BAYSIDE	DELAWARE RIVER	4/16/86	0.1	0.2
NJ:OYSTER CREEK	OYSTER CREEK	5/21/86	0.1	0.2
NV:BOULDER CITY	COLORADO RIVER	4/ 8/86	0.2	0.2
NY:CHELSEA	HUDSON RIVER	4/10/86	0.2	0.2
NY:OSSINING	HUDSON RIVER	4/16/86	0.2	0.2
NY:OSWEGO	LAKE ONTARIO	6/30/86	0.2	0.2

TABLE 11 (CONTINUED)

SURFACE WATER
TRITIUM CONCENTRATION

APRIL - JUNE 1986

LOCATION	SOURCE	DATE COLLECTED	nCi/l	± 2s
OH:TOLEDO	LAKE ERIE	4/ 1/86	0.1	0.2
PA:DANVILLE	SUSQUEHANNA RIVER	4/22/86	0.3	0.2
SC:ALLENDALE	SAVANNAH RIVER	5/ 1/86	3.6	0.2
SC:BROAD RIVER	BROAD RIVER	4/30/86	0.3	0.2
SC:HARTSVILLE	LAKE ROBINSON	4/14/86	0.8	0.2
TN:DAISY	TENNESSEE RIVER	5/20/86	0.4	0.2
TN:KINGSTON	CLINCH RIVER	4/15/86	3.2	0.2
TX:EL PASO	RIO GRANDE	4/29/86	0.2	0.2
TX:MATAGORDA	COLORADO RIVER	4/ 9/86	0.1	0.2
VA:NEWPORT NEWS	JAMES RIVER	5/ 7/86	0.2	0.2
WA:NORTHPORT	COLUMBIA RIVER	5/20/86	0.2	0.2
WA:RICHLAND	COLUMBIA RIVER	4/ 7/86	0.2	0.2
WI:TWO CREEKS	LAKE MICHIGAN	5/16/86	0.4	0.2
WI:VICTORY	MISSISSIPPI RIVER	4/ 7/86	0.3	0.2
WV:WHEELING	OHIO RIVER	6/ 3/86	0.2	0.2

s = SIGMA COUNTING ERROR

TABLE 11.1

SURFACE WATER
ANNUAL GAMMA ANALYSIS

1986

LOCATION	SOURCE	DATE COLLECTED	GAMMA pCi/l ± 2s
AL:DECATUR	TENNESSEE RIVER	4/ 8/86	ND
AL:GORDAN	CHATTAHOOCHEE R.	4/ 1/86	ND
AL:SCOTTSBORO	TENNESSEE RIVER	4/ 9/86	ND
AR:LITTLE ROCK	ARKANSAS RIVER	4/ 1/86	ND
CA:DIABLO CANYON	PACIFIC OCEAN	4/11/86	ND
CA:EUREKA	HUMBOLDT BAY	4/15/86	^{40}K 293 ±37%
CA:SAN ONOFRE	PACIFIC OCEAN	6/19/86	^{40}K 248 ±35%
CO:GREELEY	SOUTH PLATTE RIVER	4/ 8/86	ND
CT:EAST HADDAM	CONNECTICUT RIVER	5/29/86	ND
CT:WATERFORD	LONG ISLAND SOUND	5/29/86	^{40}K 372 ±51%
FL:CRYSTAL RIVER	GULF OF MEXICO	4/ 7/86	ND
FL:FORT PIERCE	ATLANTIC OCEAN	4/22/86	ND
FL:HOMESTEAD	BISCAYNE BAY	4/15/86	ND
IA:CEDAR RAPIDS	CEDAR RIVER	4/ 9/86	ND
ID:BUHL	SNAKE RIVER	4/28/86	ND
IL:E. MOLINE	MISSISSIPPI RIVER	5/15/86	ND
IL:MORRIS	ILLINOIS RIVER	4/15/86	ND
IL:ZION	LAKE MICHIGAN	5/15/86	ND
KS:LE ROY	NEOSHO RIVER	7/29/86	ND
LA:NEW ORLEANS	MISSISSIPPI RIVER	4/10/86	ND
MA:PLYMOUTH	CAPE COD BAY	4/ 7/86	ND
MD:CONOWINGO	SUSQUEHANNA RIVER	4/15/86	ND
MD:LUSBY	CHESAPEAKE BAY	4/ 8/86	ND
ME:WISCASSET	MONTSEWAY BAY	4/ 8/86	^{40}K 119± 71%
MI:BRIDGMAN	LAKE MICHIGAN	4/14/86	ND
MI:CHARLEVOIX	LAKE MICHIGAN	4/12/86	ND
MI:MONROE	LAKE ERIE	4/ 6/86	ND
MI:SO. HAVEN	LAKE MICHIGAN	4/14/86	ND
MN:MONTICELLO	MISSISSIPPI RIVER	4/ 9/86	ND
MN:RED WING	MISSISSIPPI RIVER	5/20/86	ND
MS:PORT GIBSON	MISSISSIPPI RIVER	4/17/86	ND
NC:CHARLOTTE	CATAWBA RIVER	4/ 7/86	ND
NC:SOUTHPORT	ATLANTIC OCEAN	4/11/86	^{40}K 201± 48%
NE:RULO	MISSOURI RIVER	4/15/86	ND
NJ:BAYSIDE	DELAWARE RIVER	4/16/86	^{40}K 239± 79%
NJ:OYSTER CREEK	OYSTER CREEK	5/21/86	ND
NV:BOULDER CITY	COLORADO RIVER	4/ 8/86	ND
NY:CHELSEA	HUDSON RIVER	4/10/86	ND

TABLE 11.1 (CONTINUED)

SURFACE WATER
ANNUAL GAMMA ANALYSIS

1986

LOCATION	SOURCE	DATE COLLECTED	GAMMA pCi/l ± 2s
NY:OSSINING	HUDSON RIVER	4/16/86	ND
OH:TOLEDO	LAKE ERIE	4/ 1/86	ND
PA:DANVILLE	SUSQUEHANNA RIVER	4/22/86	ND
SC:ALLENDALE	SAVANNAH RIVER	5/ 1/86	ND
SC:BROAD RIVER	BROAD RIVER	4/30/86	ND
SC:HARTSVILLE	LAKE ROBINSON	4/14/86	ND
TN:DAISY	TENNESSEE RIVER	5/20/86	ND
TN:KINGSTON	CLINCH RIVER	4/15/86	ND
TX:EL PASO	RIO GRANDE	4/29/86	ND
TX:MATAGORDA	COLORADO RIVER	4/ 9/86	ND
VA:NEWPORT NEWS	JAMES RIVER	5/ 7/86	ND
WA:NORTHPORT	COLUMBIA RIVER	5/20/86	ND
WA:RICHLAND	COLUMBIA RIVER	4/ 7/86	ND
WI:TWO CREEKS	LAKE MICHIGAN	5/16/86	ND
WI:VICTORY	MISSISSIPPI RIVER	4/ 7/86	ND
WV:WHEELING	OHIO RIVER	6/ 3/86	ND

ND = NO GAMMA ACTIVITY DETECTABLE
s = SIGMA COUNTING ERROR

Drinking Water

This program monitors ambient radiation levels in drinking water at 78 sites. These data serve to assess trends and anomalies in concentrations, and to compare with standards set forth in the EPA "National Interim Primary Drinking Water Regulations." These regulations provide for approval of supplies when the combined radium-226 and radium-228 levels do not exceed 5 pCi/l, when the gross alpha (excluding radon and uranium) levels do not exceed 15 pCi/l, when tritium levels do not exceed 20,000 pCi/l, when the strontium-90 levels do not exceed 8 pCi/l, and when the gross beta levels do not exceed 50 pCi/l.

Grab samples are taken at 78 sites which are either major population centers or selected nuclear facility environs.

The analyses include (a) tritium on a quarterly basis; (b) gross alpha, gross beta, strontium-90, and gamma on annual composites; (c) radium-226 if the gross alpha exceeds 2 pCi/l and radium-228 if the radium-226 falls between 3 and 5 pCi/l; (d) specific iodine-131 on one quarterly sample per year for each station; and (e) an annual composite for plutonium-238 and -239 and uranium-234, -235, and -238 for stations that demonstrate gross alpha levels greater than 2 pCi/l.

Tritium analyses are performed by scintillation counting of the distilled samples. Gross beta and alpha are determined by evaporating an aliquot on a stainless steel planchet for counting. Radium-226 is determined by the standard emanation technique. Strontium-90 is determined by beta counting a strontium carbonate precipitate isolated by ion exchange.

The results of tritium in drinking water analyses for April - June are shown in Table 12.

TABLE 12

DRINKING WATER
TRITIUM CONCENTRATION

APRIL - JUNE 1986

LOCATION	DATE COLLECTED	nCi/l	± 2s
AK:FAIRBANKS	4/ 9/86	0.2	0.2
AL:DOTHAN	4/ 2/86	0.3	0.2
AL:MONTGOMERY	4/ 7/86	0.2	0.2
AL:MUSCLE SHOALS	4/ 8/86	0.2	0.2
AL:SCOTTSBORO	4/ 9/86	0.2	0.2
AR:LITTLE ROCK	4/ 3/86	0.1	0.2
CA:BERKELEY	4/ 3/86	0.2	0.2
CA:LOS ANGELES	4/ 8/86	0.2	0.2
CO:DENVER	4/21/86	0.2	0.2
CO:PLATTEVILLE	4/21/86	0.2	0.2
CT:HARTFORD	4/ 4/86	0.2	0.2
DC:WASHINGTON	4/ 7/86	0.2	0.2
DE:DOVER	4/ 2/86	0.1	0.2
FL:MIAMI	4/14/86	0.1	0.2
FL:TAMPA	4/15/86	0.1	0.2
GA:SAVANNAH	4/ 8/86	5.6	0.3
HI:HONOLULU	4/24/86	0.3	0.2
IA:CEDAR RAPIDS	4/ 9/86	0.2	0.2
ID:IDAHO FALLS	5/ 5/86	0.2	0.2
IL:MORRIS	4/ 4/86	0.4	0.2
IL:W. CHICAGO	4/ 1/86	0.2	0.2
KS:TOPEKA	4/ 2/86	0.3	0.2
LA:NEW ORLEANS	4/ 3/86	0.3	0.2
MA:LAWRENCE	4/ 8/86	0.1	0.2
MD:BALTIMORE	5/15/86	0.4	0.2
MD:CONOWINGO	4/15/86	0.1	0.2
ME:AUGUSTA	5/ 1/86	0.2	0.2
MI:DETROIT	4/ 9/86	0.4	0.2
MI:GRAND RAPIDS	4/10/86	0.2	0.2
MN:MINNEAPOLIS	4/14/86	0.1	0.2
MN:RED WING	5/20/86	0.1	0.2
MO:JEFFERSON CITY	5/21/86	0.2	0.2
MS:JACKSON	4/ 1/86	0.1	0.2
MS:PORT GIBSON	4/ 1/86	0.1	0.2
MT:HELENA	4/ 7/86	0.3	0.2
NC:CHARLOTTE	4/ 7/86	0.2	0.2
NC:WILMINGTON	4/11/86	0.3	0.2
ND:BISMARCK	4/ 8/86	0.3	0.2

TABLE 12 (CONTINUED)

DRINKING WATER
TRITIUM CONCENTRATION

APRIL - JUNE 1986

LOCATION	DATE COLLECTED	nCi/l	± 2s
NE:LINCOLN	4/17/86	0.3	0.2
NH:CONCORD	4/ 3/86	0.2	0.2
NJ:TRENTON	4/ 7/86	0.3	0.2
NJ:WARETOWN	5/21/86	0.2	0.2
NV:LAS VEGAS	4/ 8/86	0.2	0.2
NY:ALBANY	4/ 7/86	0.1	0.2
NY:NEW YORK CITY	4/21/86	0.2	0.2
NY:NIAGARA FALLS	4/ 7/86	0.2	0.2
NY:SYRACUSE	5/13/86	0.3	0.2
OH:COLUMBUS	5/22/86	0.2	0.2
OH:EAST LIVERPOOL	4/15/86	0.2	0.2
OH:PAINESVILLE	4/ 2/86	0.3	0.2
OH:TOLEDO	4/ 1/86	0.1	0.2
OK:OKLAHOMA CITY	4/ 2/86	0.1	0.2
OR:PORTLAND	4/ 7/86	0.2	0.2
PA:HARRISBURG	4/11/86	0.1	0.2
PA:PITTSBURGH	4/15/86	0.2	0.2
PC:ANCON	4/ 8/86	0.2	0.2
RI:PROVIDENCE	4/17/86	0.3	0.2
SC:BARNWELL	4/17/86	0.2	0.2
SC:COLUMBIA	4/ 4/86	0.3	0.2
SC:COLUMBIA	5/ 8/86	0.1	0.2
SC:HARTSVILLE	4/14/86	0.1	0.2
SC:JENKINSVILLE	4/11/86	0.1	0.2
SC:SENECA	4/22/86	0.4	0.2
TN:CHATTANOOGA	4/ 1/86	0.3	0.2
TN:KNOXVILLE	4/ 1/86	0.2	0.2
TX:AUSTIN	4/ 7/86	0.3	0.2
VA:DOSWELL	4/24/86	0.3	0.2
VA:LYNCHBURG	4/ 1/86	0.1	0.2
VA:VIRGINIA BEACH	5/23/86	0.2	0.2
VI:ST. THOMAS	5/ 7/86	0.1	0.2
WA:RICHLAND	4/ 7/86	0.2	0.2
WA:SEATTLE	6/ 3/86	0.3	0.2
WI:GENOA CITY	4/ 7/86	0.1	0.2
WI:MADISON	4/ 2/86	0.1	0.2

s = SIGMA COUNTING ERROR

SECTION III. External Gamma Ambient Monitoring Program

The external gamma monitoring program, which began in October 1978, provides a continuous measurement of ambient gamma exposure rates, including cosmic, at selected sites throughout the continental United States. Data from this program are used to evaluate fluctuations in natural background due to variations in environmental conditions and to provide a means of monitoring any significant increases in ambient gamma levels. The program consists of approximately 22 sites representing a wide geographic coverage throughout the country.* Although exposure measurements at these few sites are not totally representative of nationwide exposures, they will be indicative of national trends.

The monitoring program utilizes CaF_2:Mn thermoluminescent dosimeters(TLD's). These dosimeters are commercially available glass-bulb type dosimeters with energy compensating shields. A group of three TLD's is located at each station or site. Dosimeters are annealed by the station operator prior to positioning in the field. The dosimeters are returned to the EERF for readout approximately every three months. Several dosimeters are annealed by the station operator as controls and returned with the exposed field dosimeters to correct for any exposures accumulated during shipment.

Results from the period April - June are shown in Table 13.

* Some of these sites may not return dosimeters each period and consequently the number of sites listed may vary slightly.

TABLE 13

ENVIRONMENTAL GAMMA AMBIENT MONITORING PROGRAM

LOCATION	DATE RANGE	INTEGRATED EXPOSURE	EXPOSURE RATE	
		MR	MICRO R/HR ± 2 s *	
AL:MONTGOMERY	4/03/86- 7/01/86	18.2	8.5	6.7
CA:BERKELEY	4/01/86- 7/03/86	15.4	6.9	5.0
CO:DENVER	3/31/86- 7/02/86	35.2	15.8	3.6
FL:ORLANDO	4/01/86- 6/30/86	15.9	7.4	6.4
IL:CHICAGO	4/08/86- 7/09/86	21.6	9.8	3.3
ND:BISMARCK	4/18/86- 7/15/86	21.3	10.1	4.4
NJ:TRENTON	4/03/86- 7/03/86	28.1	12.9	2.9
NM:SANTA FE	4/03/86- 7/14/86	36.6	15.0	5.1
NV:LAS VEGAS	4/02/86- 7/01/86	18.1	8.4	5.5
NY:NEW YORK	4/18/86- 8/01/86	23.8	9.4	3.3
OH:COLUMBUS	1/02/86- 7/09/86	37.6	8.3	7.0
OK:OKLAHOMA CITY	4/11/86- 7/08/86	19.7	9.3	6.0
OR:PORTLAND	3/31/86- 7/02/86	19.0	8.5	4.9
PA:HARRISBURG	4/01/86- 7/07/86	19.2	8.3	4.3
PA:PITTSBURGH	4/04/86- 7/03/86	26.9	12.5	3.1
RI:PROVIDENCE	4/09/86- 7/01/86	22.2	11.1	4.7
SC:BARNWELL	5/01/86- 7/10/86	16.7	10.0	6.1
SC:COLUMBIA	4/01/86- 7/07/86	29.9	12.8	6.8
TN:KNOXVILLE	4/02/86- 7/08/86	26.3	11.3	4.5
VT:MONTPELIER	4/28/86- 7/10/86	15.6	8.9	4.2

* s = SIGMA ERROR (IN PERCENT)

SECTION IV. Milk Program

Pasteurized Milk

This is a cooperative program with the Dairy and Lipid Products Branch, Milk Sanitation Section, Food and Drug Administration. Milk is a reliable indicator of the general population's intake of radionuclides since it is consumed fresh by a large segment of the population and can contain several of the biologically important radionuclides that would result from environmental releases from nuclear activities. A primary function of this program is to obtain reliable monitoring data relative to current radionuclide concentrations and determine any long-term trends.

Monthly samples are collected at 65 sampling sites with one or more located in each state, Puerto Rico, and the Panama Canal. The samples are composited, according to production, from the major milk suppliers representing more than 80 percent of the milk consumed in a given population center.

The samples are analyzed for iodine-131, barium-140, cesium-137, and potassium. All 65 samples are analyzed annually in July for strontium-89, and strontium-90. Also, for the first month of the three quarters beginning January, April and October, 10 regional composite samples of milk made up from the sites within each of EPA's 10 regions are analyzed for strontium-89 and strontium-90.

Iodine-131, barium-140, cesium-137 and potassium are determined by gamma spectral analysis. Strontium-89 and strontium-90 are determined by beta counting a total strontium precipitate which has been chemically separated by ion-exchange.

Following the Chernobyl event on April 26, 1986, the sampling of milk for radioactivity was augmented during May and June 1986. Measurements during this interval in milk recorded a number of fresh fission products. The results for the April-June milk samples are shown in Tables 14 - 16 and include the results from the routine samples of that interval as well as the additional samples collected.

Analysis of milk samples for strontium 89 and 90 was also increased to include measurement of these nuclides in milk samples at each collection station during each weekly interval in May and June.

Due to the past history of weapons testing in the U.S. and the long half life of strontium 90, this nuclide is typically detected in a significant fraction in any set of milk samples. The measured strontium in this interval was not significantly elevated beyond historical values.

Normally the strontium samples within each EPA geographical region are composited for the second quarter. However, due to the potential importance of these samples, they were analyzed separately and the results are listed by location in Table 17.

TABLE 14

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

APRIL 1986

LOCATION	DATE COLLECTED	K g/l±2s		^{137}Cs pCi/l±2s		^{140}Ba pCi/l±2s		^{131}I pCi/l±2s	
AL:MONTGOMERY	4/11/86	1.50	0.12	4	7	-3	9	0	7
AR:LITTLE ROCK	4/14/86	1.49	0.12	4	7	-3	9	6	7
AZ:PHOENIX	4/10/86	1.33	0.12	2	7	-1	9	4	7
CA:LOS ANGELES	4/ 1/86	1.48	0.12	2	7	7	9	2	7
CA:SACRAMENTO	4/ 2/86	1.46	0.12	0	7	-4	9	1	7
CA:SAN FRANCISCO	4/ 7/86	1.60	0.09	4	5	1	6	1	5
CT:HARTFORD	4/ 7/86	1.57	0.13	1	7	-2	9	6	7
FL:TAMPA	4/ 2/86	1.51	0.13	6	7	-1	9	1	7
HI:HONOLULU	4/ 1/86	1.63	0.13	0	7	2	9	2	7
IA:DES MOINES	4/ 8/86	1.45	0.12	7	7	7	9	2	7
ID:IDAHO FALLS	4/14/86	1.55	0.13	2	7	4	9	5	7
IL:CHICAGO	4/ 7/86	1.45	0.12	5	7	4	9	0	7
IN:INDIANAPOLIS	4/ 7/86	1.57	0.13	5	7	4	9	6	7
KS:WICHITA	4/ 2/86	1.64	0.13	-1	7	1	9	-5	7
KY:LOUISVILLE	4/ 8/86	1.43	0.12	7	7	1	9	2	7
LA:NEW ORLEANS	4/28/86	1.51	0.13	0	7	0	9	5	7
MA:BOSTON	4/ 8/86	1.59	0.13	5	7	-1	9	5	7
MD:BALTIMORE	4/ 2/86	1.46	0.12	1	7	5	9	2	7
ME:PORTLAND	4/ 1/86	1.59	0.13	3	7	-2	9	2	7
MI:DETROIT	4/10/86	1.50	0.12	5	7	-2	9	1	7
MI:GRAND RAPIDS	4/ 7/86	1.53	0.09	6	5	2	6	-1	5
MN:MINNEAPOLIS	4/ 7/86	1.52	0.13	3	7	3	9	6	7
MN:ST. PAUL	4/ 3/86	1.50	0.13	5	7	2	9	-1	7
MO:KANSAS CITY	4/11/86	1.46	0.08	3	5	3	6	3	5
MO:ST. LOUIS	4/ 2/86	1.50	0.13	2	7	5	9	5	7
MS:JACKSON	4/ 7/86	1.58	0.09	3	5	-2	6	6	5
MT:HELENA	4/15/86	1.65	0.13	5	7	-3	9	3	7
NC:CHARLOTTE	4/28/86	1.65	0.24	2	18	-6	18	-1	14
ND:MINOT	4/22/86	1.65	0.13	0	7	0	9	6	7
NE:OMAHA	4/11/86	1.48	0.12	3	7	7	9	4	7
NH:MANCHESTER	4/14/86	1.61	0.13	-1	7	6	9	0	7
NJ:TRENTON	4/ 9/86	1.54	0.09	4	5	1	6	3	5
NM:ALBUQUERQUE	4/ 7/86	1.50	0.09	2	5	-2	6	7	5
NY:BUFFALO	4/ 7/86	1.45	0.12	8	7	2	9	0	7
NY:NEW YORK CITY	4/ 7/86	1.53	0.13	3	7	3	9	4	7
NY:SYRACUSE	4/ 7/86	1.54	0.13	6	7	3	9	4	7
OH:CINCINNATI	4/14/86	1.53	0.13	1	7	4	9	1	7
OR:PORTLAND	4/ 7/86	1.57	0.13	-1	7	-2	9	4	7

TABLE 14 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

APRIL 1986

LOCATION	DATE COLLECTED	K g/l±2s		^{137}Cs pCi/l±2s		^{140}Ba pCi/l±2s		^{131}I pCi/l±2s	
PA:PITTSBURGH	4/10/86	1.63	0.09	1	5	-1	6	4	5
PC:CRISTOBAL	4/21/86	1.47	0.12	8	7	-2	9	2	7
PR:SAN JUAN	4/23/86	1.57	0.13	-1	7	8	9	7	7
SD:RAPID CITY	4/ 7/86	1.60	0.13	7	7	3	9	8	7
TN:CHATTANOOGA	4/ 7/86	1.55	0.13	1	7	1	9	7	7
TN:KNOXVILLE	4/ 7/86	1.75	0.24	-1	18	-1	19	2	14
TN:MEMPHIS	4/15/86	1.46	0.12	8	7	6	9	2	7
TX:AUSTIN	4/23/86	1.46	0.12	1	7	-3	9	3	7
UT:SALT LAKE CITY	4/ 7/86	1.57	0.13	-3	7	3	9	-1	7
VA:NORFOLK	4/ 3/86	1.51	0.13	8	7	2	9	2	7
VT:BURLINGTON	4/ 7/86	1.46	0.08	0	5	-1	6	-3	5
WA:SEATTLE	4/ 7/86	1.53	0.09	2	5	3	6	3	5
WI:MILWAUKEE	4/30/86	1.54	0.13	1	7	1	9	0	7
WV:CHARLESTON	4/29/86	1.69	0.17	4	13	2	13	4	10
WY:LARAMIE	4/ 8/86	1.70	0.09	6	5	-1	6	-1	5

s = SIGMA COUNTING ERROR

TABLE 15

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

MAY 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
AK:ANCHORAGE	5/ 7/86	1.56 0.11	11 6	2 8	6 6
AK:ANCHORAGE	5/ 9/86	1.57 0.16	13 9	4 10	9 9
AK:ANCHORAGE	5/13/86	1.58 0.16	5 9	-5 10	5 9
AK:ANCHORAGE	5/16/86	1.39 0.16	8 12	6 12	-8 9
AK:ANCHORAGE	5/20/86	1.52 0.16	3 9	-2 10	8 9
AK:ANCHORAGE	5/22/86	1.48 0.16	10 9	3 10	4 9
AK:ANCHORAGE	5/27/86	1.74 0.16	9 9	7 11	-1 9
AK:ANCHORAGE	5/30/86	1.62 0.16	29 10	2 10	4 9
AL:ASHFORD	5/ 9/86	1.51 0.16	12 9	3 10	8 9
AL:ASHFORD	5/12/86	1.54 0.16	7 9	0 10	-5 9
AL:ASHFORD	5/15/86	1.54 0.16	4 9	5 11	23 10
AL:ASHFORD	5/19/86	1.55 0.16	3 9	-2 10	17 10
AL:MONTGOMERY	5/ 6/86	1.57 0.13	6 7	-2 9	8 7
AL:MONTGOMERY	5/ 9/86	1.50 0.16	-3 8	-11 10	3 9
AL:MONTGOMERY	5/13/86	1.52 0.16	7 9	3 11	11 9
AL:MONTGOMERY	5/16/86	1.52 0.16	10 12	10 12	10 10
AL:MONTGOMERY	5/20/86	1.43 0.16	14 12	8 12	10 10
AL:MONTGOMERY	5/23/86	1.51 0.16	5 9	0 11	15 9
AL:MONTGOMERY	5/27/86	1.57 0.16	7 9	8 11	2 9
AL:MONTGOMERY	5/30/86	1.75 0.17	9 9	4 12	8 9
AR:LITTLE ROCK	5/ 6/86	1.60 0.16	2 9	0 10	9 9
AR:LITTLE ROCK	5/13/86	1.54 0.16	4 9	4 10	-5 9
AR:LITTLE ROCK	5/16/86	1.55 0.11	4 6	3 8	8 6
AR:LITTLE ROCK	5/20/86	1.42 0.16	14 12	3 12	19 11
AR:LITTLE ROCK	5/23/86	1.39 0.16	13 9	5 11	9 9
AR:LITTLE ROCK	5/30/86	1.55 0.11	12 6	6 8	15 8
AZ:PHOENIX	5/ 6/86	1.55 0.13	3 7	-5 9	22 13
AZ:PHOENIX	5/ 9/86	1.71 0.17	4 9	3 11	7 9
AZ:PHOENIX	5/13/86	1.46 0.16	2 9	-4 11	8 9
AZ:PHOENIX	5/16/86	1.53 0.16	3 9	-3 10	8 9
AZ:PHOENIX	5/20/86	1.42 0.16	8 12	14 12	3 10
AZ:PHOENIX	5/23/86	1.38 0.16	1 9	5 11	32 13
AZ:PHOENIX	5/27/86	1.53 0.16	6 9	6 10	19 12
AZ:PHOENIX	5/30/86	1.56 0.16	2 9	-1 11	12 9

TABLE 15 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

MAY 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
CA:LOS ANGELES	5/ 2/86	1.52 0.09	5 5	0 6	3 5
CA:LOS ANGELES	5/ 6/86	1.54 0.11	4 6	3 8	5 6
CA:LOS ANGELES	5/ 9/86	1.58 0.16	0 9	-4 10	3 9
CA:LOS ANGELES	5/13/86	1.69 0.16	2 9	2 10	-3 9
CA:LOS ANGELES	5/16/86	1.71 0.16	3 9	5 10	0 9
CA:LOS ANGELES	5/20/86	1.53 0.16	-4 9	12 12	5 9
CA:LOS ANGELES	5/22/86	1.58 0.11	1 6	2 7	6 6
CA:LOS ANGELES	5/27/86	1.62 0.16	7 9	2 11	5 9
CA:LOS ANGELES	5/29/86	2.36 0.19	6 12	0 12	29 14
CA:SACRAMENTO	5/ 2/86	1.48 0.12	2 7	1 9	7 7
CA:SACRAMENTO	5/ 6/86	1.59 0.16	-1 9	3 10	-5 9
CA:SACRAMENTO	5/13/86	1.53 0.09	3 5	-3 6	22 6
CA:SACRAMENTO	5/16/86	1.54 0.16	1 9	-7 10	40 11
CA:SACRAMENTO	5/19/86	1.60 0.16	4 9	9 11	9 9
CA:SACRAMENTO	5/20/86	1.69 0.16	6 9	0 10	25 10
CA:SACRAMENTO	5/23/86	1.50 0.16	14 9	0 10	28 11
CA:SACRAMENTO	5/27/86	1.55 0.16	-1 9	-4 11	41 12
CA:SACRAMENTO	5/30/86	1.68 0.17	14 12	-4 12	35 12
CA:SAN FRANCISCO	5/ 6/86	1.59 0.16	0 9	7 10	3 9
CA:SAN FRANCISCO	5/ 8/86	1.60 0.11	1 6	2 7	-1 6
CA:SAN FRANCISCO	5/13/86	1.56 0.16	-1 9	0 10	9 9
CA:SAN FRANCISCO	5/16/86	1.57 0.17	2 12	13 12	36 12
CA:SAN FRANCISCO	5/20/86	1.53 0.16	8 9	6 12	36 11
CA:SAN FRANCISCO	5/23/86	1.56 0.16	4 9	0 10	38 14
CA:SAN FRANCISCO	5/27/86	1.36 0.15	1 9	7 10	26 10
CA:SAN FRANCISCO	5/30/86	1.59 0.17	10 12	1 12	27 12
CO:DENVER	5/ 1/86	1.62 0.13	-1 7	0 9	1 7
CO:DENVER	5/ 6/86	1.56 0.16	2 9	5 11	6 9
CO:DENVER	5/ 9/86	1.57 0.16	1 9	3 11	7 9
CO:DENVER	5/13/86	1.62 0.16	2 9	-1 10	-4 9
CO:DENVER	5/15/86	1.28 0.16	8 9	3 11	7 9
CO:DENVER	5/20/86	1.42 0.16	2 12	5 12	18 12
CO:DENVER	5/22/86	1.40 0.15	8 9	8 11	7 9
CO:DENVER	5/28/86	1.52 0.11	3 6	-2 7	14 7
CO:DENVER	5/30/86	1.65 0.16	5 9	0 11	10 9

TABLE 15 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

MAY 1986

LOCATION	DATE COLLECTED	K g/l±2s		^{137}Cs pCi/l±2s		^{140}Ba pCi/l±2s		^{131}I pCi/l±2s	
CT:HARTFORD	5/ 5/86	1.60	0.12	3	7	2	8	2	7
CT:HARTFORD	5/ 8/86	1.65	0.17	11	9	8	12	1	9
CT:HARTFORD	5/12/86	1.52	0.16	-5	9	-3	10	5	9
CT:HARTFORD	5/15/86	1.56	0.16	5	9	-2	10	15	10
CT:HARTFORD	5/19/86	1.51	0.16	4	9	2	10	11	9
CT:HARTFORD	5/22/86	1.48	0.11	3	6	3	7	15	7
CT:HARTFORD	5/27/86	1.58	0.16	13	9	5	12	23	12
DC:WASHINGTON	5/13/86	1.66	0.16	-3	9	1	10	-3	9
DC:WASHINGTON	5/16/86	1.51	0.16	1	9	-1	11	6	9
DC:WASHINGTON	5/19/86	1.47	0.16	24	13	13	12	46	12
DC:WASHINGTON	5/27/86	1.54	0.16	5	9	-2	10	4	9
DC:WASHINGTON	5/30/86	1.52	0.11	6	6	3	8	12	6
DE:WILMINGTON	5/12/86	1.47	0.16	7	9	13	12	7	9
DE:WILMINGTON	5/15/86	1.56	0.16	-4	9	0	10	-4	9
DE:WILMINGTON	5/19/86	1.37	0.16	13	12	4	12	2	10
DE:WILMINGTON	5/21/86	1.43	0.16	11	12	10	12	7	10
DE:WILMINGTON	5/27/86	1.52	0.16	3	9	2	10	6	9
DE:WILMINGTON	5/29/86	1.47	0.16	1	9	7	12	10	9
FL:TAMPA	5/ 6/86	1.48	0.16	8	9	7	10	-9	9
FL:TAMPA	5/ 9/86	1.65	0.11	16	6	-2	7	3	6
FL:TAMPA	5/13/86	1.49	0.16	11	9	0	10	-1	9
FL:TAMPA	5/16/86	1.63	0.16	4	9	2	10	8	9
FL:TAMPA	5/20/86	1.58	0.11	7	6	2	8	9	6
FL:TAMPA	5/23/86	2.41	0.19	2	12	7	13	12	10
FL:TAMPA	5/28/86	1.78	0.16	8	9	-6	10	-1	9
FL:TAMPA	5/30/86	1.62	0.16	10	9	0	11	3	9
GA:ATLANTA	5/ 7/86	1.54	0.10	7	6	-2	7	5	6
GA:ATLANTA	5/ 9/86	1.47	0.16	-3	9	2	11	6	9
GA:ATLANTA	5/13/86	1.55	0.16	8	9	-5	10	1	9
GA:ATLANTA	5/15/86	1.42	0.15	1	9	-3	10	5	9
GA:ATLANTA	5/19/86	1.42	0.16	8	9	6	11	14	9
GA:ATLANTA	5/23/86	1.45	0.16	13	12	4	12	19	11
GA:ATLANTA	5/27/86	1.62	0.16	6	9	-1	10	13	9
GA:ATLANTA	5/30/86	1.57	0.13	10	7	-2	9	21	11
HI:HILO	5/21/86	1.52	0.16	23	10	12	12	51	12

TABLE 15 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

MAY 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
HI:HONOLULU	5/ 6/86	1.64 0.16	11 9	-7 10	2 9
HI:HONOLULU	5/16/86	1.57 0.16	5 12	0 12	1 10
HI:HONOLULU	5/19/86	1.65 0.16	1 9	1 10	3 9
HI:HONOLULU	5/22/86	1.62 0.17	12 12	10 12	-1 10
HI:HONOLULU	5/26/86	1.55 0.16	5 9	7 11	-1 9
HI:HONOLULU	5/29/86	1.74 0.11	2 6	-5 7	3 6
IA:DES MOINES	5/ 5/86	1.42 0.16	5 9	2 11	0 9
IA:DES MOINES	5/13/86	1.55 0.11	3 6	-2 8	3 6
IA:DES MOINES	5/16/86	1.54 0.11	6 6	4 7	4 6
IA:DES MOINES	5/20/86	1.55 0.16	3 9	6 10	22 10
IA:DES MOINES	5/23/86	1.48 0.16	8 9	6 12	36 12
IA:DES MOINES	5/27/86	1.59 0.16	10 9	5 10	37 11
ID:BOISE	5/14/86	1.40 0.11	3 6	8 8	10 6
ID:BOISE	5/16/86	1.59 0.16	8 9	12 12	58 11
ID:BOISE	5/20/86	1.54 0.16	11 9	4 12	98 12
ID:BOISE	5/23/86	1.33 0.16	26 13	12 12	102 13
ID:BOISE	5/27/86	1.57 0.16	20 9	1 10	97 12
ID:BOISE	5/30/86	1.56 0.17	42 13	11 13	72 13
ID:IDAHO FALLS	5/ 6/86	1.62 0.16	3 9	-3 10	-2 9
ID:IDAHO FALLS	5/ 8/86	1.53 0.16	3 9	-1 10	-6 9
ID:IDAHO FALLS	5/11/86	1.62 0.16	4 9	-6 11	6 9
ID:IDAHO FALLS	5/15/86	1.53 0.16	7 12	3 12	12 10
ID:IDAHO FALLS	5/18/86	1.61 0.16	7 9	-2 10	13 9
ID:IDAHO FALLS	5/27/86	1.59 0.16	3 9	-1 11	9 9
ID:IDAHO FALLS	5/29/86	1.53 0.16	2 9	6 10	-2 9
IL:CHICAGO	5/ 5/86	1.61 0.13	1 7	0 9	2 7
IL:CHICAGO	5/ 9/86	1.56 0.16	-2 9	15 12	9 9
IL:CHICAGO	5/13/86	1.57 0.11	1 6	-1 7	-1 6
IL:CHICAGO	5/16/86	1.54 0.16	4 9	4 11	12 9
IL:CHICAGO	5/29/86	1.57 0.16	10 9	4 10	24 13
IN:INDIANAPOLIS	5/ 5/86	1.45 0.12	3 7	7 9	5 7
IN:INDIANAPOLIS	5/ 9/86	0.69 0.14	1 9	5 11	7 9
IN:INDIANAPOLIS	5/13/86	1.56 0.16	-2 9	-4 10	3 9
IN:INDIANAPOLIS	5/16/86	1.64 0.16	2 9	-1 10	7 9
IN:INDIANAPOLIS	5/20/86	1.32 0.16	7 12	8 12	9 10
IN:INDIANAPOLIS	5/23/86	1.60 0.16	5 9	-1 10	4 9
IN:INDIANAPOLIS	5/27/86	1.63 0.16	4 9	4 10	10 9
IN:INDIANAPOLIS	5/30/86	1.58 0.16	4 9	5 10	2 9

TABLE 15 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

MAY 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
KS:WICHITA	5/ 5/86	1.65 0.13	-2 7	3 9	2 7
KS:WICHITA	5/ 9/86	1.65 0.16	4 9	-2 10	4 9
KS:WICHITA	5/13/86	1.55 0.16	3 9	0 10	4 9
KS:WICHITA	5/16/86	1.50 0.16	4 9	4 10	17 10
KS:WICHITA	5/20/86	1.63 0.16	4 9	2 10	30 11
KS:WICHITA	5/23/86	1.50 0.16	7 9	4 11	30 11
KS:WICHITA	5/27/86	1.67 0.16	10 9	-4 10	31 11
KY:LOUISVILLE	5/ 6/86	1.60 0.16	3 9	-5 10	1 9
KY:LOUISVILLE	5/ 9/86	1.59 0.16	1 9	-2 11	4 9
KY:LOUISVILLE	5/13/86	1.44 0.16	8 9	2 11	12 9
KY:LOUISVILLE	5/15/86	1.47 0.16	-5 9	8 11	8 9
KY:LOUISVILLE	5/20/86	1.31 0.16	13 12	7 12	15 10
KY:LOUISVILLE	5/23/86	1.69 0.16	5 9	4 10	7 9
KY:LOUISVILLE	5/27/86	1.58 0.11	13 8	7 8	13 7
KY:LOUISVILLE	5/30/86	1.62 0.17	13 12	5 12	10 10
LA:NEW ORLEANS	5/12/86	1.50 0.16	10 9	-2 10	6 9
LA:NEW ORLEANS	5/27/86	1.69 0.16	11 9	2 10	26 11
MA:BOSTON	5/ 6/86	1.48 0.16	5 9	6 10	0 9
MA:BOSTON	5/ 9/86	1.52 0.16	7 9	-5 11	5 9
MA:BOSTON	5/13/86	1.31 0.30	6 23	3 24	6 18
MA:BOSTON	5/16/86	1.60 0.16	9 9	5 12	22 10
MA:BOSTON	5/20/86	1.28 0.16	-1 12	16 12	10 10
MA:BOSTON	5/23/86	1.59 0.16	7 9	2 10	10 9
MA:BOSTON	5/27/86	1.59 0.16	9 9	3 11	22 10
MA:BOSTON	5/30/86	1.43 0.16	11 9	7 12	18 11
MD:BALTIMORE	5/ 2/86	1.57 0.13	3 7	2 9	3 7
MD:BALTIMORE	5/ 6/86	1.58 0.16	-1 9	9 11	-1 9
MD:BALTIMORE	5/ 9/86	1.54 0.16	7 9	9 11	-1 9
MD:BALTIMORE	5/13/86	1.53 0.16	7 9	7 12	-1 9
MD:BALTIMORE	5/16/86	1.59 0.17	16 12	9 12	11 10
MD:BALTIMORE	5/19/86	1.70 0.17	-1 9	-1 11	39 12
MD:BALTIMORE	5/22/86	1.67 0.16	2 9	11 11	31 15
MD:BALTIMORE	5/26/86	1.52 0.16	11 12	2 12	9 10
MD:BALTIMORE	5/29/86	1.58 0.17	8 12	9 12	15 10

TABLE 15 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

MAY 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
ME:PORTLAND	5/ 6/86	1.53 0.12	7 7	-6 8	3 7
ME:PORTLAND	5/13/86	1.48 0.16	-3 9	-5 10	11 9
ME:PORTLAND	5/16/86	1.36 0.15	10 9	3 10	19 10
ME:PORTLAND	5/20/86	1.73 0.23	24 17	9 17	41 14
ME:PORTLAND	5/23/86	1.32 0.16	5 9	8 11	16 10
ME:PORTLAND	5/27/86	1.60 0.16	12 9	11 11	21 12
ME:PORTLAND	5/31/86	1.49 0.16	6 9	-1 10	8 9
MI:DETROIT	5/ 9/86	1.64 0.16	4 9	1 11	4 9
MI:DETROIT	5/15/86	1.67 0.17	-2 9	9 12	9 9
MI:DETROIT	5/15/86	1.57 0.16	7 9	2 10	8 9
MI:DETROIT	5/20/86	1.38 0.16	11 12	10 12	7 10
MI:DETROIT	5/23/86	1.59 0.16	0 9	-3 10	14 9
MI:DETROIT	5/27/86	1.57 0.16	2 9	-6 11	11 9
MI:GRAND RAPIDS	5/ 5/86	1.56 0.12	7 7	5 8	-3 7
MI:GRAND RAPIDS	5/ 8/86	1.60 0.16	17 9	0 10	10 9
MI:GRAND RAPIDS	5/12/86	1.53 0.16	8 9	1 10	8 9
MI:GRAND RAPIDS	5/15/86	1.62 0.16	8 9	2 11	3 9
MI:GRAND RAPIDS	5/19/86	1.87 0.32	10 23	-2 24	13 19
MI:GRAND RAPIDS	5/22/86	1.45 0.16	-3 9	8 11	10 9
MI:GRAND RAPIDS	5/27/86	1.47 0.16	6 9	0 10	18 11
MN:MINNEAPOLIS	5/ 5/86	1.58 0.11	5 6	-3 7	3 6
MN:MINNEAPOLIS	5/12/86	1.51 0.16	-2 9	10 12	2 9
MN:MINNEAPOLIS	5/15/86	1.48 0.16	6 9	-1 11	10 9
MN:MINNEAPOLIS	5/19/86	1.41 0.11	10 8	-1 8	16 7
MN:MINNEAPOLIS	5/22/86	1.64 0.16	7 9	0 11	31 11
MN:MINNEAPOLIS	5/28/86	1.61 0.16	3 9	9 11	24 15
MN:ST. PAUL	5/ 6/86	1.65 0.16	-5 9	9 11	1 9
MN:ST. PAUL	5/ 8/86	1.64 0.16	3 9	5 11	11 9
MN:ST. PAUL	5/12/86	1.56 0.16	3 9	4 10	-1 9
MN:ST. PAUL	5/15/86	1.50 0.16	5 9	5 11	7 9
MN:ST. PAUL	5/19/86	1.59 0.16	3 9	1 10	0 9
MN:ST. PAUL	5/22/86	1.51 0.16	-1 12	9 12	3 10
MN:ST. PAUL	5/27/86	1.58 0.16	7 9	3 10	21 12
MN:ST. PAUL	5/29/86	1.46 0.16	6 12	3 12	23 11
MO:KANSAS CITY	5/ 6/86	1.49 0.16	0 9	2 10	0 9
MO:KANSAS CITY	5/15/86	1.50 0.11	7 8	5 8	4 7
MO:KANSAS CITY	5/20/86	1.54 0.16	2 9	3 11	13 9
MO:KANSAS CITY	5/23/86	0.84 0.14	18 9	2 11	9 9
MO:KANSAS CITY	5/27/86	1.48 0.16	-4 9	9 12	25 11

TABLE 15 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

MAY 1986

LOCATION	DATE COLLECTED	K g/l±2s		^{137}Cs pCi/l±2s		^{140}Ba pCi/l±2s		^{131}I pCi/l±2s	
MO:ST. LOUIS	5/ 7/86	1.56	0.16	6	9	0	11	3	9
MO:ST. LOUIS	5/ 9/86	1.48	0.16	6	9	3	10	0	9
MO:ST. LOUIS	5/13/86	1.57	0.16	9	9	1	10	-2	9
MO:ST. LOUIS	5/16/86	1.57	0.16	4	9	-1	11	9	9
MO:ST. LOUIS	5/23/86	1.61	0.16	2	9	3	11	17	10
MO:ST. LOUIS	5/27/86	1.57	0.16	10	9	-3	11	17	10
MO:ST. LOUIS	5/30/86	1.55	0.16	6	12	1	12	7	10
MS:JACKSON	5/ 6/86	1.58	0.16	2	9	-2	11	5	9
MS:JACKSON	5/ 8/86	1.61	0.16	0	9	4	11	10	9
MS:JACKSON	5/13/86	1.60	0.16	3	9	2	11	13	9
MS:JACKSON	5/16/86	1.50	0.11	13	8	-1	8	1	7
MS:JACKSON	5/21/86	1.53	0.16	12	12	3	12	1	10
MS:JACKSON	5/23/86	1.60	0.16	3	9	4	11	18	11
MS:JACKSON	5/27/86	1.62	0.11	6	6	2	7	15	7
MS:JACKSON	5/30/86	1.53	0.16	7	9	-5	11	32	13
MT:HELENA	5/ 6/86	1.67	0.12	5	6	6	8	21	8
MT:HELENA	5/13/86	1.57	0.16	-6	9	3	10	26	10
MT:HELENA	5/16/86	1.60	0.16	17	9	0	11	54	12
MT:HELENA	5/20/86	1.27	0.16	40	13	13	12	52	12
MT:HELENA	5/23/86	1.52	0.16	43	10	8	12	91	13
MT:HELENA	5/28/86	1.43	0.16	51	13	9	12	61	16
MT:HELENA	5/30/86	1.52	0.16	14	9	-3	11	31	12
NC:CHARLOTTE	5/ 6/86	1.51	0.16	4	9	6	10	-3	9
NC:CHARLOTTE	5/ 9/86	1.48	0.16	5	9	3	10	-3	9
NC:CHARLOTTE	5/13/86	1.53	0.16	6	9	-1	10	-1	9
NC:CHARLOTTE	5/16/86	1.68	0.17	5	9	-2	11	6	9
NC:CHARLOTTE	5/20/86	1.61	0.16	5	9	3	10	21	10
NC:CHARLOTTE	5/23/86	1.55	0.12	6	8	3	8	8	7
NC:CHARLOTTE	5/27/86	1.53	0.16	10	9	10	12	12	9
NC:CHARLOTTE	5/30/86	1.48	0.16	9	9	12	12	9	9
ND:MINOT	5/ 8/86	1.49	0.16	4	9	1	10	-5	9
ND:MINOT	5/13/86	1.61	0.16	1	9	2	10	-1	9
ND:MINOT	5/16/86	1.44	0.16	0	12	7	12	12	10
ND:MINOT	5/20/86	1.59	0.16	3	9	0	11	13	9
ND:MINOT	5/23/86	1.52	0.16	7	9	3	11	67	14
ND:MINOT	5/27/86	1.50	0.16	1	9	3	10	26	16
ND:MINOT	5/30/86	0.94	0.15	12	9	3	11	2	9

TABLE 15 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

MAY 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
NE:LINCOLN	5/15/86	1.61 0.16	2 9	-9 10	13 9
NE:OMAHA	5/ 2/86	1.27 0.08	3 5	3 6	5 5
NE:OMAHA	5/ 5/86	1.70 0.16	1 9	2 10	-4 9
NE:OMAHA	5/ 9/86	1.58 0.16	-3 9	0 11	5 9
NE:OMAHA	5/13/86	1.67 0.16	-5 9	0 10	-6 9
NE:OMAHA	5/16/86	1.42 0.16	0 9	8 12	16 10
NE:OMAHA	5/20/86	1.38 0.16	6 9	3 11	23 11
NE:OMAHA	5/23/86	1.62 0.16	1 9	10 11	19 11
NE:OMAHA	5/27/86	1.61 0.16	8 9	1 11	22 11
NH:MANCHESTER	5/ 5/86	1.46 0.10	12 6	-1 6	7 6
NH:MANCHESTER	5/ 9/86	1.49 0.16	1 9	-1 10	-5 9
NH:MANCHESTER	5/13/86	1.53 0.16	7 9	8 12	3 9
NH:MANCHESTER	5/16/86	1.58 0.16	6 9	-2 10	9 9
NH:MANCHESTER	5/20/86	1.49 0.16	9 9	0 11	23 11
NH:MANCHESTER	5/23/86	1.51 0.16	13 9	5 10	22 11
NH:MANCHESTER	5/26/86	1.67 0.16	7 9	-4 10	11 9
NJ:TRENTON	5/ 6/86	1.59 0.16	3 9	2 11	9 9
NJ:TRENTON	5/ 8/86	1.59 0.16	0 9	0 10	0 9
NJ:TRENTON	5/13/86	1.60 0.16	-1 9	10 12	0 9
NJ:TRENTON	5/15/86	1.53 0.16	2 9	-2 10	1 9
NJ:TRENTON	5/19/86	1.56 0.11	6 6	2 8	17 7
NJ:TRENTON	5/22/86	1.47 0.16	7 12	0 12	22 11
NJ:TRENTON	5/28/86	1.61 0.17	5 12	6 12	14 10
NJ:TRENTON	5/29/86	1.47 0.16	12 12	15 12	11 10
NM:ALBUQUERQUE	5/ 6/86	1.42 0.16	-6 9	6 11	4 9
NM:ALBUQUERQUE	5/12/86	1.83 0.17	0 9	1 11	0 9
NM:ALBUQUERQUE	5/15/86	1.40 0.16	11 12	6 12	1 10
NM:ALBUQUERQUE	5/19/86	1.43 0.16	6 9	12 12	18 11
NM:ALBUQUERQUE	5/22/86	1.32 0.16	10 12	14 12	12 10
NM:ALBUQUERQUE	5/26/86	1.44 0.16	8 9	2 11	11 9
NM:ALBUQUERQUE	5/28/86	1.54 0.16	7 9	9 11	11 9
NV:LAS VEGAS	5/ 6/86	1.64 0.16	-1 9	2 10	2 9
NV:LAS VEGAS	5/ 9/86	1.61 0.16	0 9	4 11	10 9
NV:LAS VEGAS	5/13/86	1.50 0.16	9 9	0 10	0 9
NV:LAS VEGAS	5/16/86	1.57 0.16	2 9	-4 10	18 10
NV:LAS VEGAS	5/20/86	1.65 0.11	3 6	-1 7	20 7
NV:LAS VEGAS	5/23/86	1.53 0.16	6 9	-3 10	34 11
NV:LAS VEGAS	5/27/86	1.54 0.16	0 9	-4 11	39 12
NV:LAS VEGAS	5/30/86	1.49 0.16	2 12	5 12	24 12

TABLE 15 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

MAY 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
NY:BUFFALO	5/ 7/86	1.67 0.17	3 9	4 11	12 9
NY:BUFFALO	5/ 9/86	1.52 0.16	8 9	-5 10	9 9
NY:BUFFALO	5/13/86	1.63 0.12	7 6	4 8	-1 6
NY:BUFFALO	5/16/86	1.55 0.12	6 8	7 8	3 7
NY:BUFFALO	5/20/86	1.43 0.16	17 12	20 13	20 11
NY:BUFFALO	5/23/86	1.66 0.16	0 9	6 11	2 9
NY:BUFFALO	5/30/86	1.53 0.16	8 12	14 12	0 10
NY:NEW YORK CITY	5/ 5/86	1.48 0.16	3 9	1 11	8 9
NY:NEW YORK CITY	5/ 7/86	1.49 0.16	5 9	10 12	11 9
NY:NEW YORK CITY	5/ 9/86	1.57 0.11	5 6	0 8	7 6
NY:NEW YORK CITY	5/13/86	1.50 0.16	11 9	5 11	12 9
NY:NEW YORK CITY	5/16/86	1.63 0.16	5 9	-2 10	32 12
NY:NEW YORK CITY	5/20/86	1.56 0.16	11 9	7 12	29 11
NY:NEW YORK CITY	5/23/86	1.51 0.16	7 9	-3 11	20 11
NY:NEW YORK CITY	5/27/86	1.67 0.12	14 6	-4 8	14 7
NY:NEW YORK CITY	5/30/86	1.55 0.16	11 9	6 11	19 11
NY:SYRACUSE	5/ 5/86	1.70 0.16	-2 9	-2 10	-6 9
NY:SYRACUSE	5/ 8/86	1.48 0.16	2 9	3 11	12 9
NY:SYRACUSE	5/12/86	1.66 0.13	0 7	3 9	7 7
NY:SYRACUSE	5/15/86	1.62 0.11	3 6	-1 7	17 7
NY:SYRACUSE	5/19/86	1.67 0.16	12 9	-4 10	19 11
NY:SYRACUSE	5/22/86	1.44 0.16	11 12	-4 12	10 10
NY:SYRACUSE	5/27/86	1.49 0.16	11 9	4 10	9 9
NY:SYRACUSE	5/29/86	1.53 0.16	9 9	13 11	5 9
OH:CINCINNATI	5/ 5/86	1.52 0.12	2 7	-1 8	-1 7
OH:CINCINNATI	5/ 9/86	1.57 0.11	-4 6	-3 8	8 6
OH:CINCINNATI	5/13/86	1.68 0.17	4 9	0 11	9 9
OH:CINCINNATI	5/16/86	1.41 0.16	4 12	5 12	8 10
OH:CINCINNATI	5/20/86	1.55 0.16	10 9	5 10	32 19
OH:CINCINNATI	5/23/86	1.45 0.11	4 6	13 8	13 6
OH:CINCINNATI	5/27/86	1.50 0.16	0 9	8 12	12 9
OH:CINCINNATI	5/30/86	1.46 0.11	12 8	5 8	4 7
OH:CLEVELAND	5/ 6/86	1.73 0.32	12 24	3 24	8 18
OH:CLEVELAND	5/ 9/86	1.69 0.17	11 9	3 11	10 9
OH:CLEVELAND	5/13/86	1.61 0.16	1 9	5 11	13 9
OH:CLEVELAND	5/16/86	1.53 0.16	-1 9	4 10	21 11
OH:CLEVELAND	5/20/86	1.55 0.16	14 12	12 12	14 10
OH:CLEVELAND	5/23/86	1.59 0.17	8 12	15 12	10 10
OH:CLEVELAND	5/27/86	1.55 0.16	8 9	2 10	12 9

TABLE 15 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

MAY 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
OK:OKLAHOMA CITY	5/ 5/86	1.46 0.16	6 9	0 10	-1 9
OK:OKLAHOMA CITY	5/ 6/86	1.33 0.15	8 9	1 10	4 9
OK:OKLAHOMA CITY	5/ 7/86	1.55 0.16	2 9	1 11	1 9
OK:OKLAHOMA CITY	5/12/86	1.70 0.16	5 9	5 11	-4 9
OK:OKLAHOMA CITY	5/16/86	1.58 0.16	13 9	4 10	27 12
OK:OKLAHOMA CITY	5/19/86	1.41 0.16	20 12	7 12	21 12
OK:OKLAHOMA CITY	5/22/86	1.50 0.16	8 12	10 12	7 10
OK:OKLAHOMA CITY	5/27/86	1.69 0.16	3 9	-1 10	5 9
OR:PORTLAND	5/ 5/86	1.49 0.12	7 7	3 8	1 7
OR:PORTLAND	5/ 6/86	1.63 0.16	4 9	1 10	9 9
OR:PORTLAND	5/ 9/86	1.64 0.16	-1 9	-7 10	5 9
OR:PORTLAND	5/13/86	1.58 0.09	7 5	3 6	18 6
OR:PORTLAND	5/16/86	1.50 0.16	17 9	0 11	35 12
OR:PORTLAND	5/20/86	1.75 0.16	33 10	13 11	46 11
OR:PORTLAND	5/23/86	1.68 0.16	22 9	3 11	21 11
OR:PORTLAND	5/27/86	1.54 0.13	33 7	2 9	35 16
PA:HARRISBURG	5/ 6/86	1.59 0.16	-1 9	5 11	4 9
PA:PHILADELPHIA	5/ 5/86	1.63 0.16	2 9	3 11	0 9
PA:PHILADELPHIA	5/ 8/86	1.61 0.16	-3 9	5 10	-6 9
PA:PHILADELPHIA	5/12/86	1.50 0.16	-1 9	2 11	8 9
PA:PHILADELPHIA	5/12/86	1.60 0.12	0 7	7 8	-2 7
PA:PHILADELPHIA	5/19/86	1.57 0.17	11 12	5 12	19 11
PA:PHILADELPHIA	5/22/86	1.47 0.16	-3 9	8 10	22 10
PA:PITTSBURGH	5/ 6/86	1.60 0.16	2 9	2 11	5 9
PA:PITTSBURGH	5/ 8/86	1.43 0.16	6 9	3 11	5 9
PA:PITTSBURGH	5/12/86	1.56 0.16	2 9	-3 11	2 9
PA:PITTSBURGH	5/15/86	1.56 0.16	2 9	-4 11	7 9
PA:PITTSBURGH	5/19/86	1.28 0.16	5 12	12 12	18 11
PA:PITTSBURGH	5/22/86	1.55 0.16	4 9	2 10	14 9
PA:PITTSBURGH	5/27/86	1.49 0.11	6 6	7 8	22 8
PA:PITTSBURGH	5/29/86	1.44 0.16	-2 9	4 10	5 9
PC:CRISTOBAL	5/13/86	1.40 0.16	15 12	2 12	4 10
PC:CRISTOBAL	5/16/86	1.42 0.16	10 12	9 12	-3 10
PC:CRISTOBAL	5/20/86	1.55 0.16	18 12	4 12	-5 9
PC:CRISTOBAL	5/23/86	1.67 0.17	14 9	10 12	7 9

TABLE 15 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

MAY 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
PR:SAN JUAN	5/ 8/86	1.58 0.16	2 9	-6 11	4 9
PR:SAN JUAN	5/12/86	1.56 0.16	4 9	-5 11	6 9
PR:SAN JUAN	5/15/86	1.46 0.11	-2 6	5 8	7 6
PR:SAN JUAN	5/19/86	1.55 0.16	11 9	6 12	8 9
PR:SAN JUAN	5/22/86	1.57 0.16	4 9	1 10	-3 9
PR:SAN JUAN	5/27/86	1.59 0.16	8 9	2 11	1 9
PR:SAN JUAN	5/29/86	1.49 0.16	9 12	10 12	9 10
RI:PROVIDENCE	5/ 9/86	1.52 0.16	6 9	-1 11	4 9
RI:PROVIDENCE	5/13/86	1.65 0.16	0 9	4 10	4 9
RI:PROVIDENCE	5/15/86	1.61 0.16	2 9	10 12	8 9
RI:PROVIDENCE	5/20/86	1.33 0.16	15 12	7 12	4 10
RI:PROVIDENCE	5/23/86	1.52 0.16	11 12	13 12	8 10
RI:PROVIDENCE	5/27/86	1.67 0.17	1 9	-1 11	14 9
SC:CHARLESTON	5/ 8/86	1.57 0.16	3 9	0 11	10 9
SC:CHARLESTON	5/13/86	1.60 0.16	6 9	-6 10	-2 9
SC:CHARLESTON	5/15/86	1.28 0.16	15 12	5 12	6 10
SC:CHARLESTON	5/20/86	1.58 0.16	6 9	2 10	11 9
SC:CHARLESTON	5/22/86	1.52 0.16	4 9	2 10	8 9
SC:CHARLESTON	5/27/86	1.47 0.16	2 9	3 10	7 9
SC:CHARLESTON	5/30/86	1.60 0.16	2 9	4 11	8 9
SD:RAPID CITY	5/ 5/86	1.48 0.16	-1 9	0 11	9 9
SD:RAPID CITY	5/ 9/86	1.53 0.16	-5 9	0 11	8 9
SD:RAPID CITY	5/13/86	1.53 0.16	4 9	7 10	2 9
SD:RAPID CITY	5/16/86	1.45 0.16	21 12	7 12	11 10
SD:RAPID CITY	5/20/86	1.38 0.16	17 12	6 12	44 11
SD:RAPID CITY	5/23/86	1.50 0.16	9 9	-2 11	47 11
SD:RAPID CITY	5/27/86	1.43 0.11	17 6	8 8	71 8
SD:RAPID CITY	5/30/86	1.60 0.16	4 9	0 11	50 12
TN:CHATTANOOGA	5/ 5/86	1.67 0.16	-1 9	-2 10	4 9
TN:CHATTANOOGA	5/ 9/86	1.57 0.16	6 9	2 10	0 9
TN:CHATTANOOGA	5/16/86	1.58 0.16	3 9	3 10	10 9
TN:CHATTANOOGA	5/20/86	1.60 0.16	7 9	3 10	9 9
TN:CHATTANOOGA	5/23/86	1.62 0.16	6 9	4 10	2 9
TN:CHATTANOOGA	5/27/86	1.57 0.13	5 7	1 9	14 8
TN:CHATTANOOGA	5/30/86	1.67 0.16	11 9	7 11	11 9

TABLE 15 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

MAY 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
TN:KNOXVILLE	5/ 5/86	1.70 0.31	27 24	6 24	17 19
TN:KNOXVILLE	5/ 9/86	1.36 0.16	7 9	-4 11	10 9
TN:KNOXVILLE	5/13/86	1.46 0.16	1 9	5 11	3 9
TN:KNOXVILLE	5/15/86	1.51 0.16	6 9	4 10	4 9
TN:KNOXVILLE	5/27/86	1.51 0.11	6 6	0 8	11 8
TN:KNOXVILLE	5/29/86	1.53 0.16	6 9	0 10	3 9
TN:MEMPHIS	5/ 7/86	1.55 0.16	7 9	0 10	-5 9
TN:MEMPHIS	5/ 9/86	1.50 0.16	5 9	-6 10	-6 9
TN:MEMPHIS	5/13/86	1.55 0.11	3 6	-2 7	-1 6
TN:MEMPHIS	5/16/86	1.53 0.12	11 8	15 10	-5 7
TN:MEMPHIS	5/20/86	1.59 0.11	9 6	5 7	15 7
TN:MEMPHIS	5/23/86	1.51 0.16	9 9	2 10	5 9
TN:MEMPHIS	5/27/86	1.57 0.16	11 9	10 11	17 10
TN:MEMPHIS	5/30/86	1.54 0.11	11 6	4 8	26 8
TX:AUSTIN	5/ 7/86	1.49 0.11	8 6	0 7	4 6
TX:AUSTIN	5/ 9/86	1.56 0.16	1 9	-1 10	0 9
TX:AUSTIN	5/13/86	1.56 0.16	3 9	-1 10	-8 9
TX:AUSTIN	5/16/86	1.45 0.16	-1 9	1 10	10 9
TX:AUSTIN	5/20/86	1.41 0.16	5 12	11 12	9 10
TX:AUSTIN	5/23/86	1.54 0.16	7 9	5 11	13 9
TX:AUSTIN	5/27/86	1.51 0.16	7 9	6 10	9 9
TX:FT. WORTH	5/ 9/86	1.65 0.16	1 9	-1 10	2 9
TX:FT. WORTH	5/13/86	1.64 0.16	1 9	4 10	0 9
TX:FT. WORTH	5/16/86	1.57 0.16	4 9	-4 11	16 10
TX:FT. WORTH	5/20/86	1.56 0.16	3 9	-2 11	20 10
TX:FT. WORTH	5/23/86	1.45 0.16	20 12	1 12	8 10
TX:FT. WORTH	5/28/86	1.65 0.16	0 9	5 10	14 9
UT:SALT LAKE CITY	5/ 5/86	1.51 0.12	3 7	-3 8	2 7
UT:SALT LAKE CITY	5/ 8/86	1.52 0.16	3 9	5 11	1 9
UT:SALT LAKE CITY	5/13/86	1.49 0.16	-3 9	2 11	26 10
UT:SALT LAKE CITY	5/15/86	1.49 0.16	15 9	-9 11	43 11
UT:SALT LAKE CITY	5/23/86	1.50 0.16	17 9	-7 11	64 11
UT:SALT LAKE CITY	5/27/86	1.63 0.16	9 9	5 12	27 11
UT:SALT LAKE CITY	5/29/86	1.65 0.16	8 9	-1 11	37 11

TABLE 15 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

MAY 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
VA:NORFOLK	5/ 6/86	1.50 0.16	6 9	7 12	2 9
VA:NORFOLK	5/ 9/86	1.61 0.16	-2 9	8 12	7 9
VA:NORFOLK	5/13/86	1.58 0.16	8 9	-1 11	0 9
VA:NORFOLK	5/16/86	1.42 0.05	7 9	12 12	12 9
VA:NORFOLK	5/20/86	1.49 0.16	-2 12	4 12	19 11
VA:NORFOLK	5/23/86	1.76 0.16	-2 9	2 10	5 9
VA:NORFOLK	5/27/86	1.56 0.16	12 9	4 12	20 10
VA:NORFOLK	5/29/86	1.58 0.16	2 9	8 11	4 9
VT:BURLINGTON	5/ 1/86	1.47 0.12	6 7	-3 9	7 7
VT:BURLINGTON	5/13/86	1.61 0.16	2 9	-1 11	3 9
VT:BURLINGTON	5/16/86	1.64 0.16	3 9	3 10	3 9
VT:BURLINGTON	5/19/86	1.58 0.16	6 9	0 10	12 9
VT:BURLINGTON	5/20/86	1.56 0.16	1 9	4 10	3 9
VT:BURLINGTON	5/23/86	1.45 0.11	10 8	11 8	5 7
VT:BURLINGTON	5/27/86	1.58 0.16	19 9	5 11	26 12
VT:BURLINGTON	5/30/86	1.56 0.17	7 12	13 12	6 10
WA:SEATTLE	5/ 6/86	1.57 0.16	3 9	1 10	-1 9
WA:SEATTLE	5/ 8/86	1.55 0.11	1 6	3 7	-2 6
WA:SEATTLE	5/13/86	1.55 0.16	15 9	3 11	54 16
WA:SEATTLE	5/15/86	1.62 0.16	41 10	15 12	59 14
WA:SEATTLE	5/20/86	1.63 0.16	46 10	5 11	48 20
WA:SEATTLE	5/22/86	1.46 0.16	46 10	11 12	59 18
WA:SEATTLE	5/27/86	1.69 0.16	53 10	12 11	23 12
WA:SPOKANE	5/ 6/86	1.57 0.13	2 7	-1 9	6 7
WA:SPOKANE	5/ 8/86	1.58 0.16	6 9	3 10	-2 9
WA:SPOKANE	5/13/86	1.59 0.16	4 9	-1 10	41 12
WA:SPOKANE	5/16/86	1.45 0.16	46 13	6 12	136 14
WA:SPOKANE	5/20/86	1.53 0.16	49 13	11 13	99 12
WA:SPOKANE	5/23/86	1.34 0.16	52 13	11 13	80 12
WA:SPOKANE	5/27/86	1.57 0.16	33 10	0 11	73 12
WI:MILWAUKEE	5/ 6/86	1.66 0.16	4 9	4 10	2 9
WI:MILWAUKEE	5/ 9/86	1.68 0.16	3 9	1 10	-1 9
WI:MILWAUKEE	5/13/86	1.59 0.11	2 6	4 8	8 7
WI:MILWAUKEE	5/16/86	1.63 0.16	-4 9	-2 10	6 9
WI:MILWAUKEE	5/20/86	1.66 0.16	3 9	1 10	8 9
WI:MILWAUKEE	5/23/86	1.49 0.16	4 9	5 10	13 9
WI:MILWAUKEE	5/27/86	1.51 0.16	2 9	1 11	25 11

TABLE 15 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

MAY 1986

LOCATION	DATE COLLECTED	K g/l±2s		^{137}Cs pCi/l±2s		^{140}Ba pCi/l±2s		^{131}I pCi/l±2s	
WV:CHARLESTON	5/ 6/86	1.99	0.32	24	24	13	24	-1	18
WV:CHARLESTON	5/ 6/86	1.53	0.16	11	9	-1	11	4	9
WV:CHARLESTON	5/ 9/86	0.74	0.14	7	9	2	11	3	9
WV:CHARLESTON	5/12/86	0.62	0.14	-2	8	3	11	6	9
WV:CHARLESTON	5/15/86	1.30	0.16	15	12	13	12	-2	10
WV:CHARLESTON	5/20/86	1.34	0.11	7	6	1	8	8	6
WV:CHARLESTON	5/23/86	1.41	0.15	9	9	4	10	22	10
WV:CHARLESTON	5/27/86	1.36	0.16	13	9	-5	11	9	9
WY:LARAMIE	5/ 6/86	1.56	0.16	6	9	1	11	0	9
WY:LARAMIE	5/ 9/86	1.54	0.16	1	9	14	11	8	9
WY:LARAMIE	5/13/86	1.65	0.16	4	9	-6	11	5	9
WY:LARAMIE	5/16/86	1.69	0.16	4	9	3	10	8	9
WY:LARAMIE	5/20/86	1.43	0.16	11	12	14	12	7	10
WY:LARAMIE	5/23/86	1.49	0.16	12	12	9	12	13	10
WY:LARAMIE	5/27/86	1.57	0.16	0	9	10	11	6	9
WY:LARAMIE	5/30/86	1.46	0.16	12	9	3	10	2	9

s = SIGMA COUNTING ERROR

TABLE 16

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

JUNE 1986

LOCATION	DATE COLLECTED	K g/l±2s		^{137}Cs pCi/l±2s		^{140}Ba pCi/l±2s		^{131}I pCi/l±2s	
AK:ANCHORAGE	6/ 3/86	1.56	0.12	3	7	-3	8	-1	7
AK:ANCHORAGE	6/ 6/86	1.60	0.16	1	9	-6	10	-4	9
AK:ANCHORAGE	6/10/86	1.43	0.16	5	9	-3	11	5	9
AK:ANCHORAGE	6/17/86	1.66	0.16	1	9	-3	10	4	9
AK:ANCHORAGE	6/25/86	1.58	0.16	7	9	2	10	8	9
AL:MONTGOMERY	6/ 3/86	1.60	0.12	9	7	2	8	4	7
AL:MONTGOMERY	6/ 6/86	1.50	0.13	9	9	2	9	5	7
AL:MONTGOMERY	6/10/86	1.58	0.13	9	9	-2	9	4	7
AL:MONTGOMERY	6/20/86	1.58	0.16	9	9	1	10	3	9
AL:MONTGOMERY	6/27/86	1.57	0.16	3	9	-3	11	8	9
AR:LITTLE ROCK	6/ 5/86	1.60	0.13	12	7	8	9	10	7
AR:LITTLE ROCK	6/10/86	1.48	0.16	13	9	3	11	12	9
AR:LITTLE ROCK	6/19/86	1.65	0.16	2	9	9	11	3	9
AR:LITTLE ROCK	6/27/86	1.60	0.16	7	9	3	10	6	9
AZ:PHOENIX	6/ 2/86	1.65	0.08	2	5	1	6	4	5
AZ:PHOENIX	6/ 6/86	1.61	0.16	-1	9	0	11	4	9
CA:LOS ANGELES	6/ 3/86	1.60	0.13	6	7	-2	9	10	7
CA:LOS ANGELES	6/ 5/86	1.57	0.16	3	9	-1	11	10	9
CA:LOS ANGELES	6/ 9/86	1.64	0.16	3	9	0	10	4	9
CA:LOS ANGELES	6/20/86	1.62	0.17	8	12	-9	12	7	10
CA:LOS ANGELES	6/27/86	1.86	0.17	4	9	4	12	6	9
CA:SACRAMENTO	6/ 3/86	1.61	0.13	1	7	2	9	24	10
CA:SACRAMENTO	6/ 6/86	1.53	0.16	-4	12	7	12	6	10
CA:SACRAMENTO	6/10/86	1.57	0.16	6	9	2	11	20	11
CA:SACRAMENTO	6/16/86	1.58	0.16	8	9	-4	11	13	9
CA:SACRAMENTO	6/23/86	1.65	0.16	4	9	1	10	-2	9
CA:SAN FRANCISCO	6/ 3/86	1.59	0.12	-1	7	2	8	10	7
CA:SAN FRANCISCO	6/ 6/86	1.63	0.16	2	9	3	11	13	9
CA:SAN FRANCISCO	6/10/86	1.56	0.16	7	12	-1	12	11	10
CA:SAN FRANCISCO	6/16/86	1.59	0.16	9	9	-2	11	5	9
CA:SAN FRANCISCO	6/25/86	1.71	0.16	5	9	4	10	11	9
CO:DENVER	6/ 3/86	1.46	0.13	11	9	10	10	6	8
CO:DENVER	6/ 6/86	1.55	0.16	8	12	2	12	7	10
CO:DENVER	6/12/86	1.52	0.12	0	7	3	8	8	7
CO:DENVER	6/17/86	1.56	0.16	9	9	-1	10	17	11
CO:DENVER	6/24/86	1.57	0.16	17	9	1	11	7	9

TABLE 16 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

JUNE 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
CT:HARTFORD	6/ 2/86	1.49 0.13	14 9	3 9	8 8
CT:HARTFORD	6/ 9/86	1.55 0.13	15 9	6 9	-1 7
CT:HARTFORD	6/16/86	1.47 0.16	12 12	10 12	2 10
CT:HARTFORD	6/23/86	1.78 0.17	12 9	7 12	53 12
DC:WASHINGTON	6/ 6/86	1.39 0.12	11 9	9 9	5 7
DC:WASHINGTON	6/13/86	1.63 0.16	7 9	1 11	8 9
DC:WASHINGTON	6/18/86	1.47 0.14	5 8	1 10	10 8
DC:WASHINGTON	6/27/86	1.65 0.12	3 7	15 10	16 9
DE:WILMINGTON	6/ 2/86	1.52 0.09	6 5	2 6	7 5
DE:WILMINGTON	6/ 9/86	1.56 0.13	12 9	1 9	6 7
DE:WILMINGTON	6/18/86	1.54 0.16	7 9	1 10	2 9
DE:WILMINGTON	6/23/86	1.60 0.16	8 9	-2 10	10 9
FL:TAMPA	6/ 3/86	1.38 0.12	9 9	0 9	4 7
FL:TAMPA	6/ 6/86	1.49 0.16	11 12	5 12	3 10
FL:TAMPA	6/13/86	1.51 0.16	7 9	0 11	4 9
FL:TAMPA	6/20/86	1.56 0.16	4 9	-5 10	4 9
FL:TAMPA	6/27/86	1.61 0.17	11 12	3 12	-6 9
GA:ATLANTA	6/ 9/86	1.43 0.12	8 7	7 8	-2 7
GA:ATLANTA	6/16/86	1.55 0.16	7 9	1 10	5 9
GA:ATLANTA	6/24/86	1.65 0.17	6 9	5 12	22 11
HI:HONOLULU	6/ 6/86	1.78 0.17	13 12	-2 12	5 10
HI:HONOLULU	6/12/86	1.51 0.13	0 7	8 9	3 7
HI:HONOLULU	6/26/86	1.78 0.16	0 9	1 10	1 9
IA:DES MOINES	6/ 3/86	1.46 0.08	8 5	2 6	19 6
IA:DES MOINES	6/10/86	1.45 0.16	13 12	3 12	7 10
IA:DES MOINES	6/17/86	1.64 0.16	16 9	8 11	5 9
IA:DES MOINES	6/25/86	1.51 0.16	17 9	4 11	18 11
ID:BOISE	6/ 2/86	1.53 0.13	35 8	11 9	92 10
ID:BOISE	6/ 5/86	1.55 0.16	26 9	5 11	39 18
ID:IDAHO FALLS	6/ 1/86	1.55 0.09	5 6	10 7	-1 5
ID:IDAHO FALLS	6/17/86	1.43 0.16	15 12	9 12	7 10
ID:IDAHO FALLS	6/24/86	1.50 0.16	6 12	2 12	-1 9
IL:CHICAGO	6/16/86	1.58 0.13	12 7	9 9	16 9
IL:CHICAGO	6/23/86	1.38 0.15	3 9	11 11	2 9
IL:CHICAGO	6/30/86	1.38 0.16	9 12	9 12	4 10
IN:INDIANAPOLIS	6/ 6/86	1.66 0.12	2 7	-7 8	8 7
IN:INDIANAPOLIS	6/13/86	1.53 0.16	5 9	-4 11	9 9
IN:INDIANAPOLIS	6/20/86	1.54 0.16	6 9	6 12	8 9

TABLE 16 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

JUNE 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
KS:WICHITA	6/ 3/86	1.52 0.13	20 10	12 10	24 10
KS:WICHITA	6/11/86	1.57 0.16	6 9	4 10	8 9
KS:WICHITA	6/18/86	1.59 0.16	21 9	11 11	38 16
KS:WICHITA	6/27/86	1.48 0.16	5 9	-3 11	11 9
KY:LOUISVILLE	6/ 3/86	1.34 0.12	15 9	2 9	14 9
KY:LOUISVILLE	6/10/86	1.56 0.16	8 9	0 10	3 9
KY:LOUISVILLE	6/17/86	1.52 0.16	18 12	8 12	-1 10
KY:LOUISVILLE	6/24/86	1.66 0.17	1 12	1 12	2 10
LA:NEW ORLEANS	6/23/86	1.43 0.13	8 9	17 11	-1 7
MA:BOSTON	6/ 3/86	1.50 0.08	16 5	4 6	8 5
MA:BOSTON	6/ 6/86	1.73 0.16	17 9	5 11	5 9
MA:BOSTON	6/ 9/86	1.38 0.12	30 10	9 10	8 8
MA:BOSTON	6/18/86	1.59 0.16	16 9	3 10	5 9
MA:BOSTON	6/23/86	1.55 0.16	8 9	9 12	3 9
MD:BALTIMORE	6/ 2/86	1.50 0.13	14 9	4 9	8 8
MD:BALTIMORE	6/ 5/86	1.68 0.17	11 9	9 12	10 9
MD:BALTIMORE	6/ 9/86	1.65 0.12	8 7	8 8	6 7
MD:BALTIMORE	6/11/86	1.60 0.16	16 9	9 11	7 9
MD:BALTIMORE	6/16/86	1.54 0.16	3 9	1 10	6 9
MD:BALTIMORE	6/19/86	1.76 0.16	17 9	6 11	11 9
MD:BALTIMORE	6/23/86	1.59 0.16	15 9	5 11	12 9
MD:BALTIMORE	6/26/86	1.66 0.17	5 12	2 12	5 10
ME:PORTLAND	6/ 3/86	1.44 0.12	8 7	3 8	-1 7
ME:PORTLAND	6/13/86	1.54 0.16	12 9	5 12	11 9
ME:PORTLAND	6/20/86	1.69 0.16	19 9	8 11	3 9
ME:PORTLAND	6/27/86	1.64 0.16	17 9	-1 11	6 9
MI:DETROIT	6/ 6/86	1.61 0.12	5 7	6 8	5 7
MI:DETROIT	6/12/86	1.57 0.17	18 12	4 12	5 10
MI:DETROIT	6/20/86	1.60 0.16	26 10	22 14	41 13
MI:DETROIT	6/25/86	1.52 0.16	21 12	3 12	7 10
MI:GRAND RAPIDS	6/ 9/86	1.60 0.12	2 7	-5 8	7 7
MI:GRAND RAPIDS	6/17/86	1.60 0.16	23 9	6 12	44 12
MI:GRAND RAPIDS	6/23/86	1.61 0.17	51 13	12 13	52 13
MI:GRAND RAPIDS	6/30/86	1.57 0.16	7 9	-2 10	0 9
MN:MINNEAPOLIS	6/ 2/86	1.63 0.09	15 6	6 6	26 6
MN:MINNEAPOLIS	6/ 5/86	1.64 0.12	8 7	5 8	17 8
MN:MINNEAPOLIS	6/10/86	1.51 0.16	26 12	3 12	12 10
MN:MINNEAPOLIS	6/17/86	1.70 0.17	18 9	11 12	38 18
MN:MINNEAPOLIS	6/24/86	1.65 0.16	13 9	3 10	5 9

TABLE 16 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

JUNE 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
MN:ST. PAUL	6/ 2/86	1.61 0.12	5 7	9 8	16 8
MN:ST. PAUL	6/ 5/86	1.69 0.13	13 7	1 8	15 8
MN:ST. PAUL	6/10/86	1.42 0.16	24 12	11 12	19 13
MN:ST. PAUL	6/17/86	1.59 0.16	15 9	9 11	13 10
MN:ST. PAUL	6/24/86	1.49 0.16	8 9	11 12	1 9
MO:KANSAS CITY	6/ 6/86	1.50 0.13	12 7	9 9	11 7
MO:KANSAS CITY	6/12/86	1.56 0.16	14 9	2 10	9 9
MO:KANSAS CITY	6/19/86	1.56 0.16	9 9	3 10	6 9
MO:KANSAS CITY	6/26/86	1.53 0.16	23 12	2 12	9 10
MO:ST. LOUIS	6/ 3/86	1.56 0.13	11 9	2 9	10 8
MO:ST. LOUIS	6/10/86	1.41 0.16	18 12	7 12	5 10
MO:ST. LOUIS	6/17/86	1.64 0.16	6 9	10 12	9 9
MO:ST. LOUIS	6/24/86	1.42 0.16	9 12	14 12	-4 10
MS:JACKSON	6/ 3/86	1.55 0.12	8 7	2 8	11 7
MS:JACKSON	6/ 6/86	1.62 0.13	11 9	4 9	7 8
MS:JACKSON	6/10/86	1.59 0.16	9 9	2 10	1 9
MS:JACKSON	6/17/86	1.61 0.16	9 9	4 11	11 9
MS:JACKSON	6/24/86	1.50 0.16	7 9	4 10	6 9
MT:HELENA	6/ 3/86	1.48 0.12	20 7	7 9	11 7
MT:HELENA	6/ 6/86	1.48 0.16	9 9	11 11	0 9
MT:HELENA	6/10/86	1.43 0.16	26 12	2 12	7 10
MT:HELENA	6/17/86	1.53 0.16	11 9	7 12	6 9
MT:HELENA	6/26/86	1.62 0.16	5 9	-1 10	1 9
NC:CHARLOTTE	6/ 3/86	1.36 0.12	0 7	2 8	7 7
NC:CHARLOTTE	6/ 6/86	1.47 0.16	23 12	4 12	0 10
NC:CHARLOTTE	6/10/86	1.46 0.12	9 7	-3 9	14 8
ND:MINOT	6/ 3/86	1.52 0.09	9 6	7 7	8 5
ND:MINOT	6/ 6/86	1.59 0.13	10 9	4 9	5 7
ND:MINOT	6/13/86	1.59 0.16	0 9	-3 10	7 9
ND:MINOT	6/20/86	1.54 0.16	6 9	-1 10	13 9
ND:MINOT	6/27/86	1.53 0.16	-1 9	4 10	8 9
NE:OMAHA	6/ 6/86	1.39 0.12	8 7	1 8	6 7
NE:OMAHA	6/13/86	1.40 0.16	25 12	1 12	20 13
NE:OMAHA	6/19/86	1.64 0.31	35 24	9 24	44 27
NE:OMAHA	6/27/86	1.54 0.16	15 12	18 13	5 10
NH:MANCHESTER	6/ 2/86	1.64 0.12	9 7	6 8	4 7
NH:MANCHESTER	6/10/86	1.42 0.16	25 12	7 12	14 10
NH:MANCHESTER	6/18/86	1.48 0.16	15 9	6 12	9 9
NH:MANCHESTER	6/24/86	1.56 0.16	15 12	5 12	3 10

TABLE 16 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

JUNE 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
NJ:TRENTON	6/12/86	1.53 0.12	12 7	0 8	2 7
NJ:TRENTON	6/18/86	1.55 0.16	13 9	3 11	7 9
NJ:TRENTON	6/26/86	1.65 0.16	7 9	7 11	-1 9
NM:ALBUQUERQUE	6/ 2/86	1.60 0.13	7 7	-1 9	18 9
NM:ALBUQUERQUE	6/ 5/86	1.50 0.16	8 9	2 10	3 9
NM:ALBUQUERQUE	6/ 9/86	1.50 0.12	2 7	4 8	2 7
NM:ALBUQUERQUE	6/16/86	1.49 0.16	18 12	-1 12	0 10
NM:ALBUQUERQUE	6/23/86	1.57 0.16	7 9	-5 11	13 9
NM:ALBUQUERQUE	6/30/86	1.58 0.16	-1 9	4 10	7 9
NV:LAS VEGAS	6/ 3/86	1.60 0.12	5 7	4 8	9 7
NV:LAS VEGAS	6/ 6/86	1.59 0.16	9 9	-7 10	19 11
NV:LAS VEGAS	6/13/86	1.53 0.16	15 12	8 12	3 10
NV:LAS VEGAS	6/20/86	1.55 0.16	6 9	6 12	12 9
NV:LAS VEGAS	6/27/86	1.65 0.16	14 9	-2 10	11 9
NY:BUFFALO	6/ 6/86	1.50 0.13	14 9	2 9	3 7
NY:BUFFALO	6/13/86	1.63 0.16	13 9	-1 10	5 9
NY:BUFFALO	6/20/86	1.67 0.16	1 9	5 10	5 9
NY:BUFFALO	6/30/86	1.55 0.16	0 12	3 12	4 10
NY:NEW YORK CITY	6/ 3/86	1.47 0.09	21 7	11 7	12 6
NY:NEW YORK CITY	6/10/86	1.60 0.12	11 7	-1 8	9 7
NY:NEW YORK CITY	6/17/86	1.48 0.16	12 12	7 12	-3 10
NY:NEW YORK CITY	6/25/86	1.48 0.16	9 12	-3 12	6 10
NY:SYRACUSE	6/ 2/86	1.44 0.13	16 9	10 10	8 8
NY:SYRACUSE	6/ 5/86	1.60 0.13	9 7	3 9	17 8
NY:SYRACUSE	6/ 9/86	1.75 0.13	14 7	5 8	14 9
NY:SYRACUSE	6/16/86	1.46 0.16	6 9	1 11	5 9
NY:SYRACUSE	6/23/86	1.48 0.16	16 9	-3 11	7 9
NY:SYRACUSE	6/30/86	1.49 0.16	6 12	5 12	1 10
OH:CINCINNATI	6/ 2/86	1.54 0.09	7 5	1 6	15 6
OH:CINCINNATI	6/ 9/86	1.64 0.16	4 9	-1 10	6 9
OH:CINCINNATI	6/17/86	1.52 0.16	11 9	8 12	12 9
OH:CINCINNATI	6/24/86	1.66 0.17	8 9	3 11	5 9
OH:CINCINNATI	6/30/86	1.53 0.16	3 9	0 10	4 9
OH:CLEVELAND	6/ 9/86	1.49 0.13	13 9	3 9	1 7
OH:CLEVELAND	6/19/86	1.41 0.16	2 9	2 11	6 9

TABLE 16 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

JUNE 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
OK:OKLAHOMA CITY	6/ 2/86	1.48 0.08	8 5	-2 6	5 5
OK:OKLAHOMA CITY	6/13/86	1.57 0.16	13 9	-2 11	20 12
OK:OKLAHOMA CITY	6/19/86	1.84 0.32	27 24	23 25	48 29
OK:OKLAHOMA CITY	6/26/86	1.80 0.32	26 24	7 24	15 19
OR:PORTLAND	6/ 2/86	1.57 0.12	17 7	2 8	5 7
OR:PORTLAND	6/18/86	1.60 0.16	19 9	4 11	8 9
OR:PORTLAND	6/25/86	1.50 0.16	18 9	1 11	6 9
PA:PHILADELPHIA	6/ 2/86	1.47 0.13	5 9	11 10	6 8
PA:PHILADELPHIA	6/ 5/86	1.54 0.16	13 12	12 12	6 10
PA:PHILADELPHIA	6/ 9/86	1.60 0.16	3 9	7 12	3 9
PA:PHILADELPHIA	6/16/86	1.60 0.17	17 12	10 12	18 12
PA:PHILADELPHIA	6/23/86	1.65 0.16	1 9	-4 10	2 9
PA:PHILADELPHIA	6/30/86	1.53 0.16	13 9	0 11	6 9
PA:PITTSBURGH	6/ 3/86	1.53 0.12	8 7	5 8	7 7
PA:PITTSBURGH	6/12/86	1.52 0.16	8 9	1 10	10 9
PA:PITTSBURGH	6/16/86	1.62 0.16	1 9	-6 10	0 9
PA:PITTSBURGH	6/20/86	1.53 0.16	2 9	6 11	0 9
PA:PITTSBURGH	6/30/86	1.57 0.16	12 12	-2 12	1 10
PC:CRISTOBAL	6/12/86	1.47 0.12	12 7	0 9	8 7
PC:CRISTOBAL	6/17/86	1.80 0.16	14 9	-1 10	29 16
PC:CRISTOBAL	6/24/86	1.47 0.16	13 9	11 12	5 9
PR:SAN JUAN	6/ 3/86	1.63 0.12	5 7	3 8	4 7
PR:SAN JUAN	6/ 6/86	1.73 0.16	8 9	-7 10	7 9
PR:SAN JUAN	6/10/86	1.56 0.16	14 9	0 11	11 9
PR:SAN JUAN	6/18/86	1.58 0.17	15 12	6 12	-2 10
PR:SAN JUAN	6/24/86	1.60 0.16	9 9	0 10	9 9
RI:PROVIDENCE	6/10/86	1.50 0.13	4 7	4 9	7 7
RI:PROVIDENCE	6/17/86	1.62 0.16	13 9	3 10	9 9
RI:PROVIDENCE	6/24/86	1.57 0.17	14 12	3 12	1 10
SC:CHARLESTON	6/ 3/86	1.61 0.13	2 7	-1 9	3 7
SC:CHARLESTON	6/ 5/86	1.63 0.13	22 10	4 10	3 7
SC:CHARLESTON	6/11/86	1.63 0.16	16 9	-1 11	26 11
SC:CHARLESTON	6/18/86	1.49 0.16	4 9	-2 10	5 9
SC:CHARLESTON	6/25/86	1.66 0.16	5 9	-1 10	1 9
SD:RAPID CITY	6/ 3/86	1.45 0.12	10 7	5 9	29 9
SD:RAPID CITY	6/ 6/86	1.59 0.16	11 9	4 12	32 12
SD:RAPID CITY	6/10/86	1.59 0.12	6 7	0 8	20 8
SD:RAPID CITY	6/17/86	1.52 0.16	4 9	-1 11	13 9
SD:RAPID CITY	6/24/86	1.54 0.16	3 9	-1 11	6 9

TABLE 16 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

JUNE 1986

LOCATION	DATE COLLECTED	K g/l±2s		^{137}Cs pCi/l±2s		^{140}Ba pCi/l±2s		^{131}I pCi/l±2s	
TN:CHATTANOOGA	6/ 2/86	1.53	0.13	4	9	8	9	8	8
TN:CHATTANOOGA	6/ 6/86	1.63	0.16	10	9	-1	10	5	9
TN:CHATTANOOGA	6/13/86	1.58	0.16	4	9	5	10	10	9
TN:CHATTANOOGA	6/17/86	1.47	0.16	14	12	7	12	8	10
TN:CHATTANOOGA	6/24/86	1.49	0.16	7	12	5	12	1	10
TN:KNOXVILLE	6/ 2/86	1.35	0.12	13	9	10	10	6	7
TN:KNOXVILLE	6/ 6/86	1.47	0.16	2	9	7	10	-1	9
TN:KNOXVILLE	6/10/86	1.51	0.16	15	9	2	10	0	9
TN:KNOXVILLE	6/16/86	1.42	0.16	15	12	1	12	5	10
TN:KNOXVILLE	6/23/86	1.78	0.32	8	23	8	24	14	19
TN:KNOXVILLE	6/30/86	1.66	0.31	-15	23	0	24	12	18
TN:MEMPHIS	6/ 3/86	1.63	0.13	7	7	-3	9	16	8
TN:MEMPHIS	6/ 6/86	1.70	0.16	7	9	-2	10	2	9
TN:MEMPHIS	6/10/86	1.49	0.16	13	12	5	12	3	10
TN:MEMPHIS	6/17/86	1.63	0.16	7	9	0	11	-1	9
TN:MEMPHIS	6/24/86	1.55	0.16	0	9	-4	10	2	9
TX:AUSTIN	6/ 6/86	1.60	0.13	4	7	6	9	2	7
TX:AUSTIN	6/13/86	1.60	0.16	10	9	7	11	2	9
TX:FT. WORTH	6/ 6/86	1.52	0.13	16	9	7	10	8	8
UT:SALT LAKE CITY	6/ 3/86	1.54	0.12	18	7	-3	8	30	8
UT:SALT LAKE CITY	6/ 6/86	1.67	0.16	7	9	-1	10	12	9
UT:SALT LAKE CITY	6/10/86	1.54	0.13	7	7	1	9	9	7
UT:SALT LAKE CITY	6/11/86	1.63	0.16	28	10	5	11	35	11
UT:SALT LAKE CITY	6/19/86	1.66	0.16	28	10	8	11	14	10
UT:SALT LAKE CITY	6/26/86	1.65	0.17	22	12	1	12	9	10
VA:NORFOLK	6/ 2/86	1.59	0.12	11	7	0	8	8	7
VA:NORFOLK	6/ 5/86	1.62	0.13	14	9	4	9	11	8
VA:NORFOLK	6/13/86	1.59	0.16	10	9	5	12	4	9
VA:NORFOLK	6/19/86	1.55	0.16	14	9	-3	11	23	13
VA:NORFOLK	6/26/86	1.66	0.17	8	9	3	11	-1	9
VT:BURLINGTON	6/ 3/86	1.59	0.13	7	7	2	9	10	7
VT:BURLINGTON	6/16/86	1.54	0.16	15	9	5	10	5	9
VT:BURLINGTON	6/18/86	1.56	0.16	19	9	2	10	10	9
VT:BURLINGTON	6/23/86	1.50	0.16	18	12	7	12	7	10
VT:BURLINGTON	6/30/86	1.52	0.16	1	9	4	10	2	9

TABLE 16 (CONTINUED)

CONCENTRATIONS OF RADIONUCLIDES IN PASTEURIZED MILK

JUNE 1986

LOCATION	DATE COLLECTED	K g/l±2s	^{137}Cs pCi/l±2s	^{140}Ba pCi/l±2s	^{131}I pCi/l±2s
WA:SEATTLE	6/ 4/86	1.52 0.13	66 10	9 10	17 9
WA:SEATTLE	6/10/86	1.53 0.16	34 10	7 11	9 9
WA:SEATTLE	6/16/86	1.56 0.16	31 10	16 12	3 9
WA:SEATTLE	6/23/86	1.56 0.12	22 7	11 8	4 7
WA:SPOKANE	6/ 2/86	1.57 0.12	27 7	6 8	33 9
WA:SPOKANE	6/ 9/86	1.39 0.16	22 12	12 12	23 13
WA:SPOKANE	6/16/86	1.62 0.16	5 9	2 10	11 9
WA:SPOKANE	6/23/86	1.55 0.16	27 12	6 12	12 10
WA:SPOKANE	6/30/86	1.43 0.16	8 12	8 12	5 10
WI:MILWAUKEE	6/18/86	1.63 0.13	7 7	-2 9	20 13
WI:MILWAUKEE	6/30/86	1.47 0.16	6 9	0 11	8 9
WV:CHARLESTON	6/ 2/86	1.68 0.24	24 18	-2 19	8 14
WV:CHARLESTON	6/ 9/86	1.86 0.25	32 19	1 19	15 14
WV:CHARLESTON	6/16/86	1.49 0.16	11 9	-2 11	10 9
WV:CHARLESTON	6/23/86	0.51 0.14	4 9	7 11	3 9
WY:LARAMIE	6/ 3/86	0.78 0.11	3 7	8 9	-1 7
WY:LARAMIE	6/ 6/86	1.58 0.31	24 24	8 24	28 19
WY:LARAMIE	6/10/86	1.68 0.24	16 18	8 19	-10 14
WY:LARAMIE	6/17/86	1.88 0.32	4 23	2 24	6 18
WY:LARAMIE	6/24/86	1.31 0.16	3 9	6 11	1 9

s = SIGMA COUNTING ERROR

TABLE 17

STRONTIUM-90 AND STRONTIUM-89 IN PASTEURIZED MILK

APRIL - JUNE 1986

LOCATION		^{90}Sr pCi/l ± 2s		^{89}Sr pCi/l ± 2s*	
AK:ANCHORAGE	5/ 7/86	2.0	0.6	0	1
AK:ANCHORAGE	5/15/86	1.7	0.4	0	1
AK:ANCHORAGE	5/25/86	2.2	0.8	0	1
AK:ANCHORAGE	6/ 1/86	1.8	2.6	1	3
AL:ASHFORD	6/ 8/86	2.7	0.6	-1	1
AL:MONTGOMERY	5/15/86	1.6	1.1	0	1
AL:MONTGOMERY	5/ 6/86	2.1	1.0	1	1
AL:MONTGOMERY	5/15/86	1.5	1.2	1	1
AL:MONTGOMERY	5/25/86	2.2	0.5	1	1
AL:MONTGOMERY	6/ 1/86	2.4	0.1	0	0
AR:LITTLE ROCK	6/ 8/86	2.7	0.4	-1	1
AR:LITTLE ROCK	5/ 6/86	4.6	0.7	0	1
AR:LITTLE ROCK	5/15/86	5.0	0.7	0	1
AR:LITTLE ROCK	5/23/86	1.7	1.0	3	1
AR:LITTLE ROCK	5/30/86	4.7	0.3	0	0
AZ:PHOENIX	6/ 8/86	5.4	1.2	-1	1
AZ:PHOENIX	5/ 6/86	-0.1	0.5	1	1
AZ:PHOENIX	5/15/86	0.0	1.3	1	2
AZ:PHOENIX	5/25/86	0.3	0.3	0	0
AZ:PHOENIX	6/ 1/86	-0.2	0.2	1	0
CA:LOS ANGELES	6/ 6/86	0.6	0.3	0	0
CA:LOS ANGELES	5/ 2/86	0.4	0.6	1	1
CA:LOS ANGELES	5/15/86	-0.5	1.1	2	1
CA:LOS ANGELES	5/25/86	1.2	2.8	0	3
CA:LOS ANGELES	6/ 1/86	-1.1	0.1	3	0
CA:SACRAMENTO	6/ 7/86	0.8	0.2	0	0
CA:SACRAMENTO	5/ 2/86	0.5	0.3	1	0
CA:SACRAMENTO	5/15/86	0.6	0.8	0	1
CA:SACRAMENTO	5/25/86	0.1	0.4	1	1
CA:SACRAMENTO	6/ 8/86	0.7	1.1	1	1
CA:SACRAMENTO	6/ 1/86	3.0	0.2	-1	0
CA:SAN FRANCISCO	6/16/86	0.6	0.4	0	1
CA:SAN FRANCISCO	5/ 6/86	0.4	0.8	1	1
CA:SAN FRANCISCO	5/15/86	0.2	1.1	1	1
CA:SAN FRANCISCO	5/25/86	-0.4	0.6	1	1
CA:SAN FRANCISCO	6/ 1/86	0.8	0.2	0	0
CA:SAN FRANCISCO	6/ 8/86	0.7	0.3	0	0
CA:SAN FRANCISCO	6/16/86	0.2	0.1	1	0

TABLE 17 (CONTINUED)

STRONTIUM-90 AND STRONTIUM-89 IN PASTEURIZED MILK

APRIL - JUNE 1986

LOCATION		^{90}Sr pCi/l ± 2s		^{89}Sr pCi/l ± 2s*	
CO:DENVER	5/ 1/86	1.3	0.6	0	1
CO:DENVER	5/15/86	0.8	0.8	1	1
CO:DENVER	5/25/86	1.4	1.5	0	2
CO:DENVER	6/ 1/86	5.4	0.1	-3	0
CO:DENVER	6/ 9/86	1.1	0.4	0	0
CO:DENVER	6/17/86	1.8	0.2	0	0
CT:HARTFORD	5/ 5/86	1.9	0.7	0	1
CT:HARTFORD	5/15/86	0.9	1.5	2	2
CT:HARTFORD	5/25/86	1.9	0.9	1	1
CT:HARTFORD	6/ 2/86	1.2	1.1	2	1
CT:HARTFORD	6/ 6/86	2.6	0.7	-1	1
CT:HARTFORD	6/16/86	2.3	0.5	0	1
DC:WASHINGTON	5/15/86	-1.2	3.3	5	4
DC:WASHINGTON	5/13/86	2.3	0.8	1	1
DC:WASHINGTON	5/27/86	1.6	0.2	1	0
DC:WASHINGTON	5/30/86	1.5	1.0	0	1
DC:WASHINGTON	6/ 6/86	2.1	0.5	0	1
DC:WASHINGTON	6/16/86	1.5	0.9	1	1
DE:WILMINGTON	5/15/86	2.5	0.3	0	0
DE:WILMINGTON	5/12/86	2.2	0.9	0	1
DE:WILMINGTON	5/25/86	2.9	1.5	0	2
DE:WILMINGTON	5/31/86	2.3	1.6	0	2
DE:WILMINGTON	6/ 9/86	2.1	2.8	1	3
DE:WILMINGTON	6/18/86	2.9	0.4	-1	1
FL:TAMPA	5/ 6/86	0.7	0.3	1	0
FL:TAMPA	5/15/86	0.9	0.4	0	0
FL:TAMPA	5/25/86	1.8	0.5	0	1
FL:TAMPA	6/ 6/86	1.3	0.7	0	1
FL:TAMPA	6/ 1/86	4.2	1.8	-2	2
FL:TAMPA	6/13/86	1.7	0.3	0	0
GA:ATLANTA	5/ 7/86	1.8	0.4	1	0
GA:ATLANTA	5/15/86	0.5	0.2	2	0
GA:ATLANTA	5/25/86	1.2	0.4	0	0
GA:ATLANTA	5/30/86	1.3	0.7	0	1
GA:ATLANTA	6/ 9/86	1.5	0.8	0	1
GA:ATLANTA	6/16/86	1.7	0.7	0	1
HI:HONOLULU	5/ 6/86	1.7	0.4	0	0
HI:HONOLULU	5/15/86	0.7	0.1	0	0
HI:HONOLULU	5/25/86	1.0	0.6	0	1
HI:HONOLULU	5/29/86	1.1	0.7	0	1
HI:HONOLULU	6/12/86	0.9	0.4	1	1

TABLE 17 (CONTINUED)

STRONTIUM-90 AND STRONTIUM-89 IN PASTEURIZED MILK

APRIL - JUNE 1986

LOCATION		^{90}Sr pCi/l ± 2s		^{89}Sr pCi/l ± 2s*	
IA:DES MOINES	5/ 5/86	3.9	0.9	-1	1
IA:DES MOINES	5/15/86	1.1	1.3	2	2
IA:DES MOINES	5/25/86	0.9	0.6	2	1
IA:DES MOINES	6/ 3/86	1.8	1.6	0	2
IA:DES MOINES	6/17/86	2.2	0.3	0	0
IA:DES MOINES	6/10/86	2.5	0.6	0	1
ID:BOISE	5/15/86	-0.7	3.2	3	4
ID:BOISE	5/25/86	0.0	0.5	2	1
ID:BOISE	6/ 5/86	0.9	1.6	2	2
ID:BOISE	6/ 1/86	0.6	2.4	2	3
ID:IDAHO FALLS	5/ 6/86	1.9	0.2	0	0
ID:IDAHO FALLS	5/15/86	0.4	0.9	3	1
ID:IDAHO FALLS	5/27/86	1.0	1.4	1	2
ID:IDAHO FALLS	5/31/86	1.3	0.7	1	1
ID:IDAHO FALLS	6/17/86	1.2	1.4	1	2
IL:CHICAGO	5/ 5/86	2.3	1.1	0	1
IL:CHICAGO	5/15/86	1.4	0.6	1	1
IL:CHICAGO	5/29/86	1.8	0.2	0	0
IL:CHICAGO	6/ 5/86	0.9	1.0	2	1
IL:CHICAGO	6/16/86	2.7	0.8	0	1
IN:INDIANAPOLIS	5/ 5/86	1.7	1.7	1	2
IN:INDIANAPOLIS	5/15/86	3.2	1.1	-1	1
IN:INDIANAPOLIS	5/25/86	2.2	0.5	0	1
IN:INDIANAPOLIS	5/30/86	2.2	0.7	0	1
IN:INDIANAPOLIS	6/ 6/86	2.6	0.5	0	1
IN:INDIANAPOLIS	6/13/86	2.7	0.2	-1	0
KS:WICHITA	5/ 5/86	-0.2	0.6	2	1
KS:WICHITA	5/15/86	3.2	3.2	-1	4
KS:WICHITA	5/25/86	0.4	2.4	4	3
KS:WICHITA	6/ 3/86	3.6	0.3	-1	0
KS:WICHITA	6/11/86	0.4	0.9	2	1
KS:WICHITA	6/18/86	3.4	0.7	-1	1
KY:LOUISVILLE	5/ 6/86	1.9	0.7	1	1
KY:LOUISVILLE	5/15/86	2.5	1.4	-1	2
KY:LOUISVILLE	5/25/86	2.6	0.5	0	1
KY:LOUISVILLE	6/ 1/86	3.8	1.0	-1	1
KY:LOUISVILLE	6/10/86	2.5	0.2	0	0
KY:LOUISVILLE	6/17/86	2.0	0.6	0	1

TABLE 17 (CONTINUED)

STRONTIUM-90 AND STRONTIUM-89 IN PASTEURIZED MILK

APRIL - JUNE 1986

LOCATION		^{90}Sr pCi/l ± 2s		^{89}Sr pCi/l ± 2s*	
LA:NEW ORLEANS	5/12/86	2.2	1.3	1	1
LA:NEW ORLEANS	5/27/86	3.7	0.9	-1	1
MA:BOSTON	5/ 6/86	1.9	0.4	0	0
MA:BOSTON	5/15/86	2.7	0.8	-1	1
MA:BOSTON	5/25/86	1.2	0.3	1	0
MA:BOSTON	6/ 1/86	2.9	0.7	0	1
MA:BOSTON	6/ 8/86	2.5	1.1	0	1
MA:BOSTON	6/18/86	3.0	0.4	0	0
MD:BALTIMORE	5/ 2/86	0.7	1.5	2	2
MD:BALTIMORE	5/15/86	2.5	1.7	0	2
MD:BALTIMORE	5/25/86	1.9	0.4	1	0
MD:BALTIMORE	5/31/86	0.6	5.9	3	7
MD:BALTIMORE	6/ 7/86	2.3	0.3	0	0
MD:BALTIMORE	6/16/86	0.5	1.2	3	1
ME:PORTLAND	5/ 6/86	2.3	0.7	0	1
ME:PORTLAND	5/15/86	0.7	0.9	2	1
ME:PORTLAND	5/25/86	2.9	0.3	0	0
ME:PORTLAND	6/ 2/86	2.7	0.7	0	1
ME:PORTLAND	6/13/86	3.3	0.5	-1	1
MI:DETROIT	5/ 9/86	1.6	0.8	1	1
MI:DETROIT	5/15/86	1.4	0.8	1	1
MI:DETROIT	5/25/86	2.1	0.6	0	1
MI:DETROIT	6/ 6/86	2.9	0.4	-1	0
MI:DETROIT	6/12/86	2.2	0.4	0	1
MI:GRAND RAPIDS	5/ 5/86	2.4	0.8	0	1
MI:GRAND RAPIDS	5/15/86	2.1	0.7	1	1
MI:GRAND RAPIDS	5/25/86	2.4	1.9	0	2
MI:GRAND RAPIDS	6/ 9/86	1.5	0.4	1	0
MI:GRAND RAPIDS	6/16/86	3.4	0.2	-1	0
MN:MINNEAPOLIS	5/ 5/86	3.3	1.0	0	1
MN:MINNEAPOLIS	5/15/86	3.7	0.8	-1	1
MN:MINNEAPOLIS	5/25/86	3.9	1.6	0	2
MN:MINNEAPOLIS	6/ 8/86	3.1	0.4	1	0
MN:MINNEAPOLIS	6/ 2/86	3.4	1.0	0	1
MN:ST. PAUL	6/17/86	4.0	0.9	-1	1
MN:ST. PAUL	5/ 6/86	3.1	1.0	0	1
MN:ST. PAUL	5/15/86	1.9	1.0	2	1
MN:ST. PAUL	5/25/86	3.3	0.3	0	0
MN:ST. PAUL	5/31/86	2.4	0.4	1	0
MN:ST. PAUL	6/ 8/86	4.3	0.7	-1	1
MN:ST. PAUL	6/17/86	3.3	0.6	0	1

TABLE 17 (CONTINUED)

STRONTIUM-90 AND STRONTIUM-89 IN PASTEURIZED MILK

APRIL - JUNE 1986

LOCATION		^{90}Sr pCi/l ± 2s		^{89}Sr pCi/l ± 2s*	
MO:KANSAS CITY	5/ 6/86	2.5	0.6	0	1
MO:KANSAS CITY	5/15/86	2.7	0.5	-1	1
MO:KANSAS CITY	5/25/86	2.3	2.1	1	2
MO:KANSAS CITY	6/ 6/86	2.8	0.7	0	1
MO:KANSAS CITY	6/12/86	2.8	0.8	0	1
MO:ST. LOUIS	5/ 7/86	2.0	1.2	0	1
MO:ST. LOUIS	5/15/86	1.9	0.7	0	3
MO:ST. LOUIS	5/25/86	-0.1	2.6	3	3
MO:ST. LOUIS	6/ 1/86	2.3	0.5	0	1
MO:ST. LOUIS	6/10/86	2.4	0.8	0	1
MO:ST. LOUIS	6/17/86	1.4	0.2	1	0
MS:JACKSON	5/ 6/86	2.1	0.5	0	1
MS:JACKSON	5/15/86	2.9	1.2	-1	2
MS:JACKSON	5/25/86	2.3	0.6	1	1
MS:JACKSON	6/ 8/86	2.4	0.2	1	0
MS:JACKSON	6/ 1/86	3.2	1.4	0	2
MS:JACKSON	6/17/86	2.9	0.3	0	0
MT:HELENA	5/ 6/86	1.4	0.8	1	1
MT:HELENA	5/15/86	1.8	0.5	0	1
MT:HELENA	5/25/86	1.1	1.5	2	2
MT:HELENA	6/ 1/86	1.8	0.5	0	1
MT:HELENA	6/ 8/86	2.0	0.8	0	1
MT:HELENA	6/17/86	-0.6	0.9	4	1
NC:CHARLOTTE	5/ 6/86	2.3	0.6	0	1
NC:CHARLOTTE	5/15/86	1.0	0.6	1	1
NC:CHARLOTTE	5/25/86	1.9	0.7	0	1
NC:CHARLOTTE	6/ 1/86	2.5	0.4	-1	0
NC:CHARLOTTE	6/ 8/86	0.6	3.0	2	4
ND:MINOT	5/ 8/86	1.9	0.6	1	1
ND:MINOT	5/15/86	1.7	0.4	1	0
ND:MINOT	5/25/86	1.5	1.7	1	2
ND:MINOT	6/ 1/86	2.7	1.4	-1	2
ND:MINOT	6/ 6/86	2.3	0.7	0	1
ND:MINOT	6/13/86	3.6	0.2	-1	0
NE:OMAHA	5/ 2/86	2.3	0.8	0	1
NE:OMAHA	5/15/86	2.4	0.2	-1	0
NE:OMAHA	5/25/86	2.0	1.2	0	1
NE:OMAHA	6/ 5/86	1.3	0.3	0	0
NE:OMAHA	6/13/86	0.7	1.0	2	1

TABLE 17 (CONTINUED)

STRONTIUM-90 AND STRONTIUM-89 IN PASTEURIZED MILK

APRIL - JUNE 1986

LOCATION		^{90}Sr pCi/l ± 2s		^{89}Sr pCi/l ± 2s*	
NH:MANCHESTER	5/ 5/86	2.8	0.9	-1	1
NH:MANCHESTER	5/15/86	1.2	0.4	1	0
NH:MANCHESTER	5/25/86	3.5	0.5	-1	1
NH:MANCHESTER	6/ 2/86	2.1	1.6	1	2
NH:MANCHESTER	6/18/86	4.6	1.0	-2	1
NH:MANCHESTER	6/10/86	2.6	0.2	1	0
NJ:TRENTON	5/ 6/86	3.0	1.4	0	2
NJ:TRENTON	5/15/86	0.2	0.6	4	1
NJ:TRENTON	5/25/86	2.4	1.0	0	1
NJ:TRENTON	6/ 1/86	3.4	0.4	0	0
NJ:TRENTON	6/15/86	2.7	0.3	0	0
NM:ALBUQUERQUE	5/ 6/86	0.4	0.3	1	0
NM:ALBUQUERQUE	5/15/86	1.9	0.2	0	0
NM:ALBUQUERQUE	5/25/86	1.6	2.0	0	2
NM:ALBUQUERQUE	5/31/86	0.8	0.7	0	1
NM:ALBUQUERQUE	6/ 7/86	1.0	0.8	0	1
NM:ALBUQUERQUE	6/16/86	0.2	0.7	1	1
NV:LAS VEGAS	5/ 6/86	-0.2	0.8	1	1
NV:LAS VEGAS	5/15/86	-0.4	0.3	1	0
NV:LAS VEGAS	5/25/86	1.4	1.4	0	2
NV:LAS VEGAS	6/ 1/86	0.7	0.9	0	1
NV:LAS VEGAS	6/ 6/86	0.8	0.2	0	0
NV:LAS VEGAS	6/13/86	0.4	0.3	1	0
NY:BUFFALO	5/ 7/86	1.9	0.3	0	0
NY:BUFFALO	5/15/86	2.9	0.6	-1	1
NY:BUFFALO	5/25/86	1.3	2.5	1	3
NY:BUFFALO	5/30/86	1.1	1.0	2	1
NY:BUFFALO	6/ 6/86	2.9	0.8	-1	1
NY:BUFFALO	6/13/86	2.3	0.5	0	1
NY:NEW YORK CITY	5/ 5/86	2.7	0.5	0	1
NY:NEW YORK CITY	5/15/86	3.4	0.8	-1	1
NY:NEW YORK CITY	5/25/86	2.9	1.2	1	1
NY:NEW YORK CITY	6/ 1/86	3.5	2.0	0	2
NY:NEW YORK CITY	6/10/86	4.3	0.6	-1	1
NY:NEW YORK CITY	6/17/86	3.7	0.4	-1	1
NY:SYRACUSE	5/ 5/86	2.3	0.4	0	1
NY:SYRACUSE	5/15/86	2.5	0.9	0	1
NY:SYRACUSE	5/25/86	2.3	1.7	1	2
NY:SYRACUSE	5/31/86	2.5	1.3	0	2
NY:SYRACUSE	6/ 7/86	2.6	0.8	0	1
NY:SYRACUSE	6/16/86	3.4	0.4	-1	0

TABLE 17 (CONTINUED)

STRONTIUM-90 AND STRONTIUM-89 IN PASTEURIZED MILK

APRIL - JUNE 1986

LOCATION		^{90}Sr pCi/l ± 2s		^{89}Sr pCi/l ± 2s*	
OH:CINCINNATI	5/ 5/86	2.3	0.4	-1	0
OH:CINCINNATI	5/15/86	-1.1	4.4	4	5
OH:CINCINNATI	5/25/86	2.0	0.4	0	0
OH:CINCINNATI	6/ 1/86	3.0	0.6	-1	1
OH:CINCINNATI	6/ 9/86	1.4	0.1	1	0
OH:CINCINNATI	6/17/86	2.0	0.1	0	0
OH:CLEVELAND	5/ 6/86	1.7	1.1	1	1
OH:CLEVELAND	5/15/86	3.2	0.6	-1	1
OH:CLEVELAND	5/25/86	3.0	0.6	0	1
OH:CLEVELAND	6/ 9/86	1.5	1.0	2	1
OH:CLEVELAND	6/ 9/86	1.9	0.5	0	1
OK:OKLAHOMA CITY	5/ 5/86	2.9	0.6	0	1
OK:OKLAHOMA CITY	5/15/86	2.0	0.3	1	0
OK:OKLAHOMA CITY	5/25/86	0.2	1.2	1	1
OK:OKLAHOMA CITY	6/ 2/86	1.6	0.2	2	0
OK:OKLAHOMA CITY	6/13/86	3.7	0.5	0	1
OR:PORTLAND	5/ 5/86	1.2	0.7	0	1
OR:PORTLAND	5/15/86	1.6	0.5	0	1
OR:PORTLAND	5/23/86	1.3	2.3	1	3
OR:PORTLAND	6/ 2/86	2.3	0.0	0	0
OR:PORTLAND	6/18/86	2.1	0.2	0	0
PA:PHILADELPHIA	5/ 5/86	2.6	0.3	-1	0
PA:PHILADELPHIA	5/15/86	2.4	1.1	0	1
PA:PHILADELPHIA	5/22/86	1.4	0.4	1	1
PA:PHILADELPHIA	6/ 7/86	1.6	1.2	0	1
PA:PHILADELPHIA	6/ 2/86	2.3	0.3	0	0
PA:PHILADELPHIA	6/16/86	2.3	0.4	0	0
PA:PITTSBURGH	5/ 6/86	2.8	1.0	0	1
PA:PITTSBURGH	5/15/86	1.1	1.6	2	2
PA:PITTSBURGH	5/25/86	4.8	0.6	-2	1
PA:PITTSBURGH	6/ 1/86	5.0	0.3	-2	0
PA:PITTSBURGH	6/14/86	3.1	0.6	0	1
PC:CRISTOBAL	5/13/86	1.3	0.7	0	1
PC:CRISTOBAL	5/15/86	1.1	1.0	0	1
PC:CRISTOBAL	5/23/86	0.7	1.9	1	2
PC:CRISTOBAL	6/15/86	1.6	0.4	0	1
PR:SAN JUAN	5/ 8/86	0.4	0.3	1	0
PR:SAN JUAN	5/15/86	1.3	0.4	-1	0
PR:SAN JUAN	5/25/86	-0.8	0.5	3	1
PR:SAN JUAN	6/ 1/86	0.9	0.1	1	0
PR:SAN JUAN	6/ 8/86	0.2	0.4	2	0
PR:SAN JUAN	6/18/86	0.7	0.3	1	0

TABLE 17 (CONTINUED)

STRONTIUM-90 AND STRONTIUM-89 IN PASTEURIZED MILK

APRIL - JUNE 1986

LOCATION		^{90}Sr pCi/l ± 2s		^{89}Sr pCi/l ± 2s*	
RI:PROVIDENCE	5/ 9/86	1.1	0.3	0	0
RI:PROVIDENCE	5/15/86	1.7	1.4	0	2
RI:PROVIDENCE	5/25/86	1.7	0.8	0	1
RI:PROVIDENCE	6/10/86	1.6	0.4	0	1
RI:PROVIDENCE	6/17/86	2.4	0.7	-1	1
SC:CHARLESTON	5/ 8/86	2.4	1.0	0	1
SC:CHARLESTON	5/15/86	1.1	0.8	1	1
SC:CHARLESTON	5/25/86	2.5	2.0	0	2
SC:CHARLESTON	6/ 8/86	2.2	0.8	0	1
SC:CHARLESTON	6/ 1/86	2.6	0.5	0	1
SC:CHARLESTON	6/18/86	2.2	0.9	-1	1
SD:RAPID CITY	5/ 5/86	1.8	1.2	1	1
SD:RAPID CITY	5/15/86	2.2	0.7	0	1
SD:RAPID CITY	5/25/86	2.0	0.3	0	0
SD:RAPID CITY	6/ 1/86	1.5	1.3	1	2
SD:RAPID CITY	6/ 8/86	2.6	0.7	0	1
SD:RAPID CITY	6/17/86	1.9	0.2	0	0
TN:CHATTANOOGA	5/ 5/86	2.0	1.4	1	2
TN:CHATTANOOGA	5/15/86	1.9	0.6	0	1
TN:CHATTANOOGA	5/25/86	3.5	0.9	-2	1
TN:CHATTANOOGA	6/ 1/86	2.5	0.5	0	1
TN:CHATTANOOGA	6/ 6/86	1.2	2.5	2	3
TN:CHATTANOOGA	6/15/86	3.1	0.5	-1	1
TN:KNOXVILLE	5/ 5/86	1.4	0.8	1	1
TN:KNOXVILLE	5/15/86	2.3	0.8	0	1
TN:KNOXVILLE	5/27/86	1.4	1.1	1	1
TN:KNOXVILLE	5/31/86	1.8	0.3	0	0
TN:KNOXVILLE	6/ 8/86	1.2	1.0	2	1
TN:KNOXVILLE	6/16/86	3.2	0.4	-1	0
TN:MEMPHIS	5/ 7/86	5.5	0.4	-2	1
TN:MEMPHIS	5/15/86	4.7	0.2	-2	0
TN:MEMPHIS	5/25/86	2.1	1.3	1	2
TN:MEMPHIS	6/ 8/86	2.4	1.1	1	1
TN:MEMPHIS	6/ 1/86	0.3	2.6	3	3
TN:MEMPHIS	6/17/86	2.7	0.4	0	0
TX:AUSTIN	4/23/86	-0.1	1.2	1	1
TX:AUSTIN	5/15/86	0.3	0.4	1	0
TX:AUSTIN	5/25/86	0.7	0.3	1	0
TX:AUSTIN	6/ 6/86	1.4	1.0	0	1
TX:AUSTIN	6/13/86	1.0	0.5	0	1

TABLE 17 (CONTINUED)

STRONTIUM-90 AND STRONTIUM-89 IN PASTEURIZED MILK

APRIL - JUNE 1986

LOCATION		^{90}Sr pCi/l ± 2s		^{89}Sr pCi/l ± 2s*	
TX:FT. WORTH	5/ 9/86	0.8	0.2	1	1
TX:FT. WORTH	5/15/86	1.5	0.4	1	1
TX:FT. WORTH	5/25/86	2.8	1.2	0	
TX:FT. WORTH	6/ 6/86	1.1	0.4	1	1
UT:SALT LAKE CITY	5/ 5/86	3.8	1.2	-2	1
UT:SALT LAKE CITY	5/15/86	0.4	1.4	1	2
UT:SALT LAKE CITY	5/25/86	0.2	0.5	2	1
UT:SALT LAKE CITY	6/ 8/86	0.7	0.7	1	1
UT:SALT LAKE CITY	6/ 1/86	1.3	0.6	1	1
VA:NORFOLK	5/ 6/86	2.0	1.8	0	2
VA:NORFOLK	5/15/86	1.2	0.2	1	0
VA:NORFOLK	5/25/86	1.3	0.1	1	0
VA:NORFOLK	5/31/86	2.2	0.3	0	0
VA:NORFOLK	6/ 5/86	3.1	0.6	-2	1
VA:NORFOLK	6/13/86	1.8	0.6	1	1
VT:BURLINGTON	5/ 1/86	2.9	0.5	-1	1
VT:BURLINGTON	5/15/86	2.0	0.6	1	1
VT:BURLINGTON	5/25/86	0.6	1.8	1	2
VT:BURLINGTON	6/ 1/86	3.1	0.3	-1	0
VT:BURLINGTON	6/16/86	4.6	0.8	-1	1
VT:BURLINGTON	6/18/86	1.3	0.4	0	1
WA:SEATTLE	5/ 6/86	0.8	1.5	1	2
WA:SEATTLE	5/15/86	-0.6	2.5	4	3
WA:SEATTLE	5/25/86	1.2	0.8	1	1
WA:SEATTLE	6/ 4/86	1.1	0.5	1	1
WA:SEATTLE	6/16/86	0.9	0.2	1	0
WA:SEATTLE	6/10/86	1.1	1.4	1	2
WA:SPOKANE	5/ 6/86	1.2	1.1	1	1
WA:SPOKANE	5/15/86	0.6	1.6	2	2
WA:SPOKANE	5/25/86	2.1	0.4	1	0
WA:SPOKANE	6/ 2/86	1.5	0.3	0	0
WA:SPOKANE	6/ 9/86	1.4	0.3	1	0
WA:SPOKANE	6/16/86	0.6	0.2	1	0
WI:MILWAUKEE	4/30/86	2.5	0.4	0	0
WI:MILWAUKEE	5/15/86	1.6	0.7	0	1
WI:MILWAUKEE	5/25/86	2.0	0.1	0	0
WI:MILWAUKEE	6/18/86	1.2	0.6	1	1

TABLE 17 (CONTINUED)

STRONTIUM-90 AND STRONTIUM-89 IN PASTEURIZED MILK

APRIL - JUNE 1986

LOCATION		^{90}Sr pCi/l ± 2s		^{89}Sr pCi/l ± 2s*	
WV:CHARLESTON	5/ 6/86	3.5	2.6	0	3
WV:CHARLESTON	5/15/86	1.5	1.5	1	2
WV:CHARLESTON	5/25/86	3.1	0.6	0	1
WV:CHARLESTON	6/ 9/86	2.8	0.4	0	1
WV:CHARLESTON	6/ 2/86	1.5	0.4	2	1
WV:CHARLESTON	6/16/86	3.1	0.3	0	0
WY:LARAMIE	5/ 6/86	0.6	0.5	0	1
WY:LARAMIE	5/15/86	0.9	0.9	0	1
WY:LARAMIE	5/25/86	0.5	0.3	1	0
WY:LARAMIE	6/ 8/86	1.0	0.2	1	0
WY:LARAMIE	6/ 1/86	0.9	0.3	0	0
WY:LARAMIE	6/17/86	0.7	0.7	0	1

s = SIGMA COUNTING ERROR
s*= ANALYTICAL ERROR TERM WHICH CLOSELY APPROXIMATES THE COUNTING ERROR

Carbon-14 in Milk

Nine stations, chosen for wide geographical distribution, contribute milk samples for annual analysis of carbon-14. These samples are used to monitor the carbon-14 levels resulting from nuclear testing.

Analysis consists of combusting the samples and measuring released carbon dioxide through liquid scintillation.

The last Carbon-14 results were for samples collected during May 1975 and May 1979. They were published in Environmental Radiation Data: Report 29.

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