RADIOACTIVITY IN GASEOUS WASTE DISCHARGED
FROM THE SEPARATIONS FACILITIES DURING 1973

J. D. Anderson

Waste Handling and Plutonium Finishing Process Engineering
Operations Technical Support Department
Manufacturing and Waste Management Division

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INTRODUCTION

This document is issued quarterly for the purpose of summarizing the radioactive gaseous wastes that are discharged from facilities of the Manufacturing and Waste Management Division, Atlantic Richfield Hanford Company. Data on alpha and beta emissions during 1973 are presented where relevant to the gaseous effluent. Emission data are not included on gaseous wastes produced within the 200 Areas by other Hanford contractors.

II

SUMMARY

During 1973, approximately 4.79×10^{11} cubic feet of gaseous effluents were monitored for radioactivity by the stack sampling program. The sum of the measured radioactivity was as follows:

Alpha (assumed source - Pu)	1.34×10^{-3} curie
Beta	0.263 curie

DISCUSSION

Gaseous effluents from CPD stacks are analyzed for alpha and beta activity. The Purex process and the AR Vault waste facilities were not monitored for ^{131}I emission because fuels processing during the report period was suspended. Analyses for other radioisotopes were performed where warranted by the alpha or beta activity level. The data in this report supersedes that contained in the first three quarters' report (ARH-2807 3Q).

Discharges from five stacks not included in last quarter's report (296-B-5, 296-S-18, 296-S-19, 296-S-22, and 296-T-12) are reported.

A summary is presented in Table I of the radioactive gaseous wastes discharged from individual stacks during 1973. Volume estimates are also included in Table I. The activity of gaseous effluents is detailed on a month-to-month basis in Table II. The average activity and the maximum activity in curies per day discharged from each stack are also presented in Table II. Identification of stacks was based upon Item 2 of the Bibliography which used 291- as the prefix for 200-foot main stacks and 296- as the prefix for other stacks.

The data presented in the tables are to be read as shown by the following examples:

$$\begin{aligned} .2411\text{E}+07 &= 0.2411 \times 10^7 \\ .2411\text{E}-07 &= 0.2411 \times 10^{-7} \end{aligned}$$

TABLE I

PAGE 1

SUMMARY OF RADIOACTIVE GASEOUS WASTE
DISCHARGED FROM SEPARATIONS FACILITIES DURING 1973

STACK	VOLUME CUBIC FEET	ALPHA (ASSUMED SOURCE)			
		PU (CI)	U (CI)	BETA (CI)	I-131 (CI)
291-A-1 PUREX PROCESS AND CANYON	.681E+11	.317E-03		.842E-02	
296-A-1 PUREX N AND Q CELLS AND PR ROOM	.273E+10	.109E-04		.479E-03	
296-A-2 PUREX WEST SAMPLE GALLERY HOODS	.199E+10	.434E-05		.202E-03	
296-A-3 PUREX EAST SAMPLE GALLERY HOODS	.220E+10	.223E-05		.937E-05	
296-A-5 PUREX LAB HOODS AND GLOVE BOXES	.102E+11	.658E-05		.842E-04	
296-A-6 PUREX EAST SAMPLE GALLERY AND U CELL	.712E+10	.108E-04		.372E-03	
296-A-7 PUREX WEST SAMPLE GALLERY AND R CELL	.104E+11	.300E-04		.334E-02	
296-A-8 PUREX P & O GALLERY (WHITE ROOM)	.102E+11	.118E-04		.167E-03	

SUMMARY OF RADIOACTIVE GASEOUS WASTE
DISCHARGED FROM SEPARATIONS FACILITIES DURING 1973

STACK	VOLUME CUBIC FEET	ALPHA (ASSUMED SOURCE) PU (CI)	U (CI)	BETA (CI)	I-131 (CI)
296-A-10 PUREX BURIAL TUNNEL NO. 2	.338E+10	.714E-06		.115E-04	
296-A-12 AR VAULT VESSEL VENT	.104E+09	.232E-06		.704E-05	
296-A-13 AR VAULT CANYON AND CELL	.977E+10	.290E-04		.870E-03	
296-A-14 293-A BLDG.	.203E+10	.319E-06		.483E-05	
296-A-17 241-A, AX AND AY TANK FARM VENT	.338E+10	.536E-05		.158E-03	
296-A-18 101-AY TANK ANNULUS	.897E+09	.150E-06		.814E-06	
296-A-19 102-AY TANK ANNULUS	.130E+10	.339E-06		.539E-05	
291-B-1 B PLANT PROCESS AND CANYON	.244E+11	.437E-04		.225E+00	
296-B-2 ITS NO. 1	.196E+10	.105E-04		.150E-02	

SUMMARY OF RADIOACTIVE GASEOUS WASTE
DISCHARGED FROM SEPARATIONS FACILITIES DURING 1973

STACK	VOLUME CUBIC FEET	ALPHA (ASSUMED SOURCE)			
		PU (CI)	U (CI)	BETA (CI)	I-131 (CI)
296-B-3 ITS NO. 2	.158E+09	.126E-05		.543E-03	
296-B-4 221-BB VESSEL VENT	.603E+08	.136E-06		.907E-05	
296-B-5 221-B3 BUILDING	.946E+09	.883E-06		.155E-04	
291-C-1 SEMIWORKS PROCESS AND CELLS	.703E+10	.100E-04		.142E-02	
296-C-2 SEMIWORKS A AND C SAMPLE GALLERIES	.302E+10	.536E-06		.315E-05	
296-C-5 CR VAULT CELL AND VESSEL VENT	.156E+10	.914E-05		.149E-03	
296-P-1 BX TANK FARM	.115E+10	.630E-06		.830E-05	
296-P-2 ITS BOTTOMS TANKS	.236E+10	.324E-05		.129E-03	
296-P-3 ITS BOTTOMS TANKS	.324E+10	.121E-04		.207E-02	

SUMMARY OF RADIOACTIVE GASEOUS WASTE
DISCHARGED FROM SEPARATIONS FACILITIES DURING 1973

STACK	VOLUME CUBIC FEET	ALPHA (ASSUMED SOURCE)			
		PU (CI)	U (CI)	BETA (CI)	I-131 (CI)
296-P-4 ITS BOTTOMS TANKS	.384E+08	.345E-07		.231E-05	
296-P-5 TANKS 105 AND 106-C	.117E+10	.446E-05		.328E-02	
296-P-6 TK-102-A	.137E+10	.814E-06		.328E-04	
296-P-7 ITS BOTTOMS TANKS	.318E+07	.110E-07		.136E-06	
296-P-9 242-TX EVAPORATOR BOTTOMS TANKS	.315E+10	.202E-05		.471E-04	
296-P-10 242-TX EVAPORATOR BOTTOMS TANKS	.190E+10	.126E-05		.818E-04	
296-P-11 242-TX EVAPORATOR BOTTOMS TANKS	.333E+08	.257E-07		.306E-05	
296-P-12 242-TX EVAPORATOR BOTTOMS TANKS	.328E+10	.231E-05		.393E-03	
296-P-13 242-TX EVAPORATOR BOTTOMS TANKS	.320E+09	.117E-06		.247E-05	

SUMMARY OF RADIOACTIVE GASEOUS WASTE
DISCHARGED FROM SEPARATIONS FACILITIES DURING 1973

STACK	VOLUME CUBIC FEET	ALPHA (ASSUMED SOURCE)			
		PU (CI)	U (CI)	BETA (CI)	I-131 (CI)
291-S-1 REDOX PROCESS AND CANYON	.209E+11	.418E-04		.981E-03	
296-S-1 REDOX SOUTH SAMPLE GALLERY	.136E+10	.440E-06		.655E-05	
296-S-2 REDOX NORTH SAMPLE GALLERY AND HOODS	.164E+10	.391E-06		.505E-05	
296-S-4 REDOX REGULATED SHOP AND TOOL ROOM AND SWP LOBBY	.227E+10	.260E-05		.633E-04	
296-S-5 REDOX PRODUCT REMOVAL CAGE	.986E+09	.246E-05		.230E-04	
296-S-6 REDOX SILO SAMPLE GALLERY	.552E+10	.510E-05		.122E-03	
296-S-7 REDOX PRODUCT (233-S) PROCESS AND GREENHOUSE	.462E+10	.577E-04		.671E-04	

SUMMARY OF RADIOACTIVE GASEOUS WASTE
DISCHARGED FROM SEPARATIONS FACILITIES DURING 1973

STACK	VOLUME CUBIC FEET	ALPHA (ASSUMED SOURCE)		BETA (CI)	I-131 (CI)
		PU (CI)	U (CI)		
296-S-13 222-S LABORATORY	.405E+11	.764E-04		.179E-02	
296-S-14 241-SX TANK FARM VENT	.466E+10	.658E-05		.929E-04	
296-S-15 241-SX SLUDGE COOLING	.113E+10	.461E-06		.308E-03	
296-S-16 REDOX LAB WASTE TANK AND VAULT	.594E+08	.102E-05		.985E-04	
296-S-18 242-S WASTE EVAP.	.164E+10	.959E-06		.647E-05	
296-S-19 242-S WASTE EVAP.	.406E+08	.158E-07		.181E-06	
296-S-22 102-S TANK	.738E+08	.500E-07		.196E-05	
291-T-1 T PLANT CANYON	.202E+11	.103E-03		.115E-02	
296-T-1 242-T EVAPORATOR HOT CELLS	.148E+09	.151E-04		.174E-02	

SUMMARY OF RADIOACTIVE GASEOUS WASTE
DISCHARGED FROM SEPARATIONS FACILITIES DURING 1973

STACK	VOLUME CUBIC FEET	ALPHA (ASSUMED SOURCE)			
		PU (CI)	U (CI)	BETA (CI)	I-131 (CI)
296-T-2 242-T EVAPORATOR COLD CELLS	.278E+09	.105E-05		.130E-03	
296-T-3 242-T EVAPORATOR VESSEL VENT	.133E+09	.280E-06		.787E-03	
296-T-12 224-T	.163E+11	.204E-05		.225E-04	
296-T-13 T PLANT CANYON	.105E+11	.254E-04		.324E-02	
296-T-16 242-TA VAULT	.404E+09	.254E-05		.438E-04	
291-U-1 U PLANT CANYON	.679E+10	.153E-04		.951E-03	
296-U-6 241-WR VAULT	.504E+09	.512E-05		.683E-03	
296-U-10 271-U PU STORAGE	.355E+10	.252E-06		.240E-05	
291-Z-1 Z PLANT PROCESS AND VENTILATION	.140E+12	.402E-03		.173E-02	

SUMMARY OF RADIOACTIVE GASEOUS WASTE
DISCHARGED FROM SEPARATIONS FACILITIES DURING 1973

	VOLUME	ALPHA (ASSUMED SOURCE)			
STACK	CUBIC FEET	PU (CI)	U (CI)	BETA (CI)	I-131 (CI)
296-Z-3					
241-Z VAULT	.379E+10	.394E-04		.869E-05	
TOTAL	.479E+12	.134E-02		.263E+00	

TABLE II

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RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	291-A-1			296-A-1			
PLANT CODE	(291-A)			(E-1)			
FACILITY	PUREX			PUREX			
FUNCTION	AIR FROM 291-A FILTERS. INCLUDES CANYON VENTILATION AIR, VESSEL, AND CONDENSER VENTS, TREATED DISSOLVER OFF GAS.			FILTERED AIR FROM N AND Q CELLS AND PR ROOM.			
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)	
JAN	.185E-04	.331E-03		.288E-05	.510E-05		
FEB	.270E-04	.859E-03		.199E-05	.717E-05		
MAR	.195E-04	.382E-03		.405E-06	.799E-05		
APR	.163E-04	.728E-03		.342E-06	.538E-05		
MAY	.303E-04	.565E-03		.806E-06	.722E-05		
JUN	.383E-05	.779E-03		.447E-07	.696E-05		
JUL	.203E-04	.754E-03		.309E-06	.968E-05		
AUG	.241E-04	.121E-02		.439E-06	.760E-05		
SEP	.760E-04	.606E-03		.625E-06	.817E-05		
OCT	.245E-04	.696E-03		.177E-05	.200E-03		
NOV	.245E-04	.763E-03		.130E-05	.124E-03		
DEC	.326E-04	.748E-03		.200E-07	.897E-04		
ADJ							
MONTHLY TOTALS	.317E-03	.842E-02		.109E-04	.479E-03		
MONTHLY MAXIMUM CONC.	(CI/DAY) .253E-05	(CI/DAY) .391E-04	(CI/DAY)	(CI/DAY) .929E-07	(CI/DAY) .646E-05	(CI/DAY)	
AVERAGE CONC.	.869E-06	.231E-04		.299E-07	.131E-05		

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RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-A-2			296-A-3		
PLANT CODE	(E-2)			(E-3)		
FACILITY	PUREX			PUREX		
FUNCTION	HOOD EXHAUST FROM WEST SAMPLE GALLERY.			HOOD EXHAUST AIR FROM EAST SAMPLE GALLERY.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.199E-06	.185E-04		.508E-07	.385E-06	
FEB	.232E-05	.178E-04		.430E-07	.438E-06	
MAR	.312E-07	.147E-04		.313E-07	.312E-06	
APR	.218E-06	.120E-04		.211E-07	.399E-06	
MAY	.472E-07	.171E-04		.175E-05	.328E-05	
JUN	.163E-06	.150E-04		.355E-07	.360E-06	
JUL	.336E-06	.219E-04		.830E-07	.118E-05	
AUG	.206E-06	.179E-04		.355E-07	.435E-06	
SEP	.444E-06	.188E-04		.578E-07	.580E-06	
OCT	.173E-07	.271E-04		.365E-07	.927E-06	
NOV	.212E-07	.604E-05		.355E-07	.591E-06	
DEC	.333E-06	.156E-04		.478E-07	.485E-06	
ADJ						
MONTHLY TOTALS	.434E-05	.202E-03		.223E-05	.937E-05	
MONTHLY MAXIMUM CONC.	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)
	.829E-07	.875E-06		.564E-07	.106E-06	
AVERAGE CONC.	.119E-07	.555E-06		.610E-08	.257E-07	

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-A-5						296-A-5
PLANT CODE	(E-5-A)						(E-5-B)
FACILITY	PUREX						PUREX
FUNCTION	FILTERED AIR FROM 202-A LAB HOODS AND GLOVE BOXES, WEST DUCT. SINGLE STACK SERVICING TWO SYSTEMS.						
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)	
JAN	.208E-06	.450E-05		.844E-06	.477E-05		
FEB	.664E-07	.775E-05		.338E-06	.209E-04		
MAR	.327E-06	.381E-05		.442E-06	.253E-05		
APR	.377E-06	.418E-05		.717E-06	.392E-05		
MAY	.288E-06	.603E-05		.197E-06	.554E-05		
JUN	.548E-07	.296E-05		.105E-06	.270E-05		
JUL	.848E-06	.336E-05		.101E-06	.809E-06		
AUG	.548E-07	.198E-05					
SEP	.534E-06	.229E-05					
OCT	.322E-06	.324E-05					
NOV	.540E-06	.173E-05					
DEC	.213E-06	.116E-05					
ADJ							
MONTHLY TOTALS	.383E-05	.439E-04		.274E-05	.412E-04		
MONTHLY MAXIMUM CONC.	(CI/DAY) .274E-07	(CI/DAY) .277E-06	(CI/DAY)	(CI/DAY) .272E-07	(CI/DAY) .748E-06	(CI/DAY)	
AVERAGE CONC.	.105E-07	.118E-06		.129E-07	.194E-06		

TABLE II

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RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-A-6			296-A-7			
PLANT CODE	(E-6)			(E-7)			
FACILITY	PUREX			PUREX			
FUNCTION	UNFILTERED AIR FROM EAST SAMPLE GALLERY AND U CELL.			UNFILTERED AIR FROM WEST SAMPLE GALLERY AND R CELL.			
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)	
JAN	.152E-05	.721E-04		.207E-05	.124E-03		
FEB	.362E-06	.319E-04		.109E-05	.901E-04		
MAR	.425E-06	.297E-04		.652E-06	.277E-03		
APR	.730E-06	.296E-04		.939E-06	.284E-03		
MAY	.113E-05	.259E-04		.376E-06	.108E-03		
JUN	.119E-05	.175E-04		.305E-05	.545E-03		
JUL	.173E-06	.224E-04		.282E-05	.572E-03		
AUG	.612E-06	.183E-04		.189E-05	.339E-03		
SEP	.172E-05	.194E-04		.146E-05	.107E-03		
OCT	.190E-05	.281E-04		.900E-05	.481E-03		
NOV	.391E-06	.561E-04		.394E-05	.304E-03		
DEC	.678E-06	.210E-04		.266E-05	.109E-03		
ADJ							
MONTHLY TOTALS	.108E-04	.372E-03		.300E-04	.334E-02		
MONTHLY MAXIMUM CONC.	(CI/DAY) .612E-07	(CI/DAY) .233E-05	(CI/DAY)	(CI/DAY) .290E-06	(CI/DAY) .184E-04	(CI/DAY)	
AVERAGE CONC.	.296E-07	.102E-05		.821E-07	.915E-05		

TABLE II

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RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-A-8			296-A-10		
PLANT CODE	(E-8)			(BT-2)		
FACILITY	PUREX			PUREX		
FUNCTION	UNFILTERED AIR FROM WEST END OF P AND O GALLERY, (WHITE ROOM EXHAUST).			FILTERED AIR FROM BURIAL TUNNEL NO. 2.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.153E-06	.588E-05		.851E-07	.627E-06	
FEB	.891E-06	.158E-04		.304E-07	.233E-05	
MAR	.738E-06	.669E-05		.380E-07	.320E-06	
APR	.246E-06	.232E-04		.688E-07	.364E-06	
MAY	.226E-05	.464E-04		.156E-06	.897E-06	
JUN	.702E-06	.754E-05		.290E-07	.379E-06	
JUL	.152E-05	.107E-04		.103E-06	.201E-05	
AUG	.121E-05	.642E-05		.406E-07	.291E-06	
SEP	.138E-06	.118E-04		.290E-07	.360E-06	
OCT	.322E-05	.218E-04		.696E-07	.342E-05	
NOV	.318E-06	.520E-05		.290E-07	.246E-06	
DEC	.417E-06	.526E-05		.348E-07	.206E-06	
ADJ						
MONTHLY TOTALS	.118E-04	.167E-03		.714E-06	.115E-04	
MONTHLY MAXIMUM CONC.	(CI/DAY) .104E-06	(CI/DAY) .150E-05	(CI/DAY)	(CI/DAY) .504E-08	(CI/DAY) .110E-06	(CI/DAY)
AVERAGE CONC.	.324E-07	.457E-06		.196E-08	.314E-07	

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ADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-A-12			296-A-13		
PLANT CODE	(AFV)			(ARCS)		
FACILITY	244-AR VAULT			244-AR VAULT		
FUNCTION	FILTERED AIR FROM VESSEL VENT SYSTEM.			FILTERED AIR FROM CANYON AND CELL VENTILATION.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.212E-07	.100E-06		.192E-05	.925E-05	
FEB	.195E-07	.383E-06		.194E-05	.379E-04	
MAR	.179E-07	.449E-06		.376E-05	.453E-04	
APR	.602E-07	.223E-05		.276E-05	.533E-03	
MAY	.747E-08	.769E-07		.193E-05	.531E-04	
JUN	.136E-07	.126E-05		.178E-05	.258E-04	
JUL	.391E-08	.519E-07		.147E-05	.191E-04	
AUG	.154E-07	.919E-06		.462E-05	.439E-04	
SEP	.268E-07	.620E-06		.346E-05	.418E-04	
OCT	.226E-07	.249E-06		.220E-05	.917E-05	
NOV	.104E-07	.514E-06		.137E-05	.265E-04	
DEC	.124E-07	.189E-06		.180E-05	.256E-04	
ADJ						
MONTHLY TOTALS	.232E-06	.704E-05		.290E-04	.870E-03	
MONTHLY MAXIMUM CONC.	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)
	.201E-08	.743E-07		.149E-06	.178E-04	
AVERAGE CONC.	.634E-09	.193E-07		.795E-07	.233E-05	

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-A-14			296-A-17			
PLANT CODE	(E-4)			(AXF)			
FACILITY	PUREX			241A,AX,AY TANK FARM			
FUNCTION	FILTERED AIR FROM 293-A BUILDING.			FILTERED NONCONDENSIBLE VAPORS FROM WASTE STORAGE TANKS IN 241-A, AX AND AY TANK FARMS.			
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)	
JAN	.241E-07	.195E-06		.330E-06	.216E-05		
FEB	.161E-07	.159E-05		.275E-06	.848E-05		
MAR	.242E-07	.161E-06		.435E-06	.103E-04		
APR	.230E-07	.180E-06		.945E-06	.691E-04		
MAY	.206E-07	.248E-06		.160E-06	.231E-05		
JUN	.172E-07	.171E-06		.190E-06	.213E-05		
JUL	.172E-07	.949E-06		.170E-06	.158E-05		
AUG	.274E-07	.301E-06		.965E-06	.144E-04		
SEP	.240E-07	.254E-06		.330E-06	.195E-04		
OCT	.275E-07	.330E-06		.470E-06	.131E-04		
NOV	.858E-07	.310E-06		.435E-06	.111E-04		
DEC	.117E-07	.146E-06		.655E-06	.387E-05		
ADJ							
MONTHLY TOTALS	.319E-06	.483E-05		.536E-05	.158E-03		
MONTHLY MAXIMUM CONC.	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	
	.286E-08	.569E-07		.315E-07	.230E-05		
AVERAGE CONC.	.873E-09	.132E-07		.147E-07	.433E-06		

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RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-A-18			296-A-19		
PLANT CODE	(101-AY)			(102-AY)		
FACILITY	101-AY TANK ANNULUS			102-AY TANK ANNULUS		
FUNCTION	FILTERED VENT 241-AY-101 TANK ANNULUS.			FILTERED VENT 241-AY-102 TANK ANNULUS.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.965E-08	.465E-07		.109E-07	.938E-07	
FEB	.118E-07	.477E-07		.724E-08	.144E-06	
MAR	.103E-07	.928E-07		.141E-07	.103E-06	
APR	.901E-08	.837E-07		.185E-07	.350E-05	
MAY	.101E-07	.951E-07		.218E-07	.122E-06	
JUN	.558E-08	.626E-07		.537E-07	.232E-06	
JUL	.107E-07	.648E-07		.174E-07	.131E-06	
AUG	.297E-07	.132E-06		.729E-07	.355E-06	
SEP	.360E-07	.956E-07		.815E-07	.364E-06	
OCT	.386E-08	.256E-07		.291E-07	.234E-06	
NOV	.504E-08	.371E-07		.653E-08	.653E-07	
DEC	.837E-08	.308E-07		.583E-08	.439E-07	
ADJ						
MONTHLY TOTALS	.150E-06	.814E-06		.339E-06	.539E-05	
MONTHLY MAXIMUM CONC.	(CI/DAY) .120E-08	(CI/DAY) .426E-08	(CI/DAY)	(CI/DAY) .272E-08	(CI/DAY) .117E-06	(CI/DAY)
AVERAGE CONC.	.411E-09	.223E-08		.930E-09	.148E-07	

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	291-B-1			296-B-2		
PLANT CODE	(291-B)			(101-BY)		
FACILITY	B PLANT (221-B)			ITS NO. 1		
FUNCTION	AIR FROM 291-B-1 FILTERS. INCLUDES CANYON VENTILATION AIR AND AIR FROM THE NO. 1 PROCESS VESSEL VENT.			FILTERED OFF GAS FROM THE PROCESS EXHAUST TRAIN.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.324E-05	.716E-01		.117E-05	.278E-04	
FEB	.924E-05	.329E-01		.474E-06	.546E-04	
MAR	.388E-05	.299E-01		.134E-05	.105E-03	
APR	.172E-05	.140E-01		.744E-06	.192E-03	
MAY	.301E-05	.104E-01		.661E-06	.814E-04	
JUN	.354E-05	.557E-02		.354E-06	.405E-04	
JUL	.310E-05	.238E-02		.122E-05	.222E-04	
AUG	.788E-05	.287E-02		.875E-06	.512E-03	
SEP	.200E-05	.367E-02		.107E-05	.331E-04	
OCT	.225E-05	.196E-01		.101E-05	.592E-04	
NOV	.273E-05	.719E-02		.651E-06	.176E-03	
DEC	.111E-05	.245E-01		.987E-06	.198E-03	
ADJ						
MONTHLY TOTALS	.437E-04	.225E+00		.105E-04	.150E-02	
MONTHLY MAXIMUM CONC.	(CI/DAY) .330E-06	(CI/DAY) .231E-02	(CI/DAY)	(CI/DAY) .431E-07	(CI/DAY) .165E-04	(CI/DAY)
AVERAGE CONC.	.120E-06	.616E-03		.289E-07	.412E-05	

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RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-B-3			296-B-4		
PLANT CODE	(112-BY)			(B-4)		
FACILITY	ITS NO. 2			221-BB BUILDING		
FUNCTION	FILTERED OFF GAS FROM THE PROCESS EXHAUST TRAIN.			FILTERED EXHAUST AIR FROM THE BCS AND BCP TANKS. DESIGNATED VESSEL VENT NO. 3.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.227E-06	.794E-04		.315E-08	.331E-07	
FEB	.164E-06	.140E-03		.160E-07	.158E-06	
MAR	.281E-06	.174E-03		.409E-08	.645E-05	
APR	.128E-06	.100E-03		.374E-08	.106E-05	
MAY	.242E-07	.235E-04		.475E-08	.406E-07	
JUN	.259E-07	.131E-04		.618E-08	.723E-07	
JUL	.187E-07	.162E-05		.905E-08	.898E-07	
AUG	.313E-07	.321E-05		.122E-07	.511E-06	
SEP	.122E-06	.359E-05		.143E-07	.221E-06	
OCT	.104E-06	.187E-05		.358E-07	.213E-06	
NOV	.671E-07	.160E-05		.122E-07	.498E-07	
DEC	.638E-07	.106E-05		.146E-07	.173E-06	
ADJ						
MONTHLY TOTALS	.126E-05	.543E-03		.136E-06	.907E-05	
MONTHLY MAXIMUM CONC.	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)
	.905E-08	.561E-05		.115E-08	.203E-06	
AVERAGE CONC.	.344E-08	.149E-05		.373E-09	.248E-07	

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-B-5			291-C-1		
PLANT CODE	(221BBS)			(SWS)		
FACILITY	221-BB BUILDING			SEMIWORKS (201-C)		
FUNCTION	DISCHARGES FILTERED AIR FROM THE 221-BB BUILDING.			FILTERED AIR FROM CELL VENTILATION AND PROCESS VESSEL VENT.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN				.569E-06	.277E-05	
FEB				.861E-06	.629E-05	
MAR				.546E-06	.212E-03	
APR				.109E-05	.303E-03	
MAY				.144E-05	.210E-04	
JUN				.455E-06	.828E-05	
JUL				.357E-06	.230E-04	
AUG	.874E-07	.218E-05		.739E-06	.248E-04	
SEP	.572E-07	.102E-05		.123E-05	.788E-03	
OCT	.722E-07	.916E-06		.849E-06	.594E-05	
NOV	.804E-07	.839E-06		.634E-06	.692E-05	
DEC	.728E-07	.154E-05		.127E-05	.156E-04	
ADJ	.513E-06 ¹	.900E-05 ¹				
MONTHLY TOTALS	.893E-06	.155E-04		.100E-04	.142E-02	
MONTHLY MAXIMUM CONC.	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)
	.282E-08	.703E-07		.465E-07	.263E-04	
AVERAGE CONC.	.242E-08	.425E-07		.275E-07	.390E-05	

¹ADJUSTMENTS ARE FOR THE FIRST SEVEN MONTHS OF THE YEAR

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-C-2			296-C-5			
PLANT CODE	(WPS)			(CRV)			
FACILITY	SEMIWORKS (201-C)			244-CR VAULT			
FUNCTION	FILTERED AIR FROM A AND C SAMPLE GALLERIES.			FILTERED AIR FROM CELL VENTILATION AND PROCESS VESSEL VENT.			
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)	
JAN	.109E-07	.165E-06		.502E-06	.223E-05		
FEB	.543E-07	.153E-06		.548E-06	.497E-05		
MAR	.217E-07	.220E-06		.424E-06	.474E-05		
APR	.123E-06	.396E-06		.535E-06	.105E-04		
MAY	.181E-07	.317E-06		.125E-05	.846E-05		
JUN	.420E-07	.384E-06		.364E-06	.398E-05		
JUL	.239E-07	.153E-06		.221E-06	.634E-05		
AUG	.290E-07	.159E-06		.540E-06	.392E-04		
SEP	.138E-06	.696E-06		.114E-05	.167E-04		
OCT	.392E-07	.137E-06		.635E-06	.169E-04		
NOV	.247E-07	.242E-06		.138E-05	.190E-04		
DEC	.109E-07	.126E-06		.161E-05	.165E-04		
ADJ							
MONTHLY TOTALS	.536E-06	.315E-05		.914E-05	.149E-03		
MONTHLY MAXIMUM CONC.	(CI/DAY) .460E-08	(CI/DAY) .232E-07	(CI/DAY)	(CI/DAY) .520E-07	(CI/DAY) .126E-05	(CI/DAY)	
AVERAGE * CONC.	.147E-08	.862E-08		.251E-07	.409E-06		

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-P-1			296-P-2		
PLANT CODE	(P-1)			(104-BY)		
FACILITY	BX TANK FARM			ITS NO. 2		
FUNCTION	PORTABLE AIR EXHAUSTER FOR 105, 106, 110 AND 111-BX TANKS IN BX FARM.			FILTERED EXHAUST AIR FROM AIR COOLING THE CONCENTRATE IN BY FARM BOTTOMS TANKS (103, 104, 105, AND 106-BY).		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.202E-07	.993E-07		.129E-06	.299E-05	
FEB	.235E-07	.181E-06		.125E-06	.294E-05	
MAR	.417E-07	.199E-06		.136E-06	.569E-05	
APR	.510E-07	.307E-05		.374E-06	.146E-04	
MAY	.152E-07	.985E-07		.345E-06	.850E-05	
JUN	.840E-08	.728E-07		.265E-06	.726E-05	
JUL	.850E-08	.101E-06		.278E-06	.363E-04	
AUG	.253E-07	.184E-06		.262E-06	.941E-05	
SEP	.185E-07	.124E-06		.322E-06	.352E-05	
OCT	.277E-07	.120E-06		.348E-06	.484E-05	
NOV	.864E-07	.260E-05		.370E-06	.882E-05	
DEC	.304E-06	.145E-05		.285E-06	.242E-04	
ADJ						
MONTHLY TOTALS	.630E-06	.830E-05		.324E-05	.129E-03	
MONTHLY MAXIMUM CONC.	(CI/DAY) .979E-08	(CI/DAY) .102E-06	(CI/DAY)	(CI/DAY) .125E-07	(CI/DAY) .117E-05	(CI/DAY)
AVERAGE CONC.	.173E-08	.227E-07		.887E-08	.353E-06	

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-P-3			296-P-4		
PLANT CODE	(107-BY)			(109-BY)		
FACILITY	ITS NO. 2			ITS NO. 2		
FUNCTION	FILTERED EXHAUST AIR FROM AIR COOLING THE CONCENTRATE IN BY FARM BOTTOMS TANKS (107, 108, 110, AND 111-BY).			FILTERED EXHAUST AIR FROM AIR COOLING THE CONCENTRATE IN BY FARM BOTTOM TANK (109-BY).		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.335E-06	.436E-04		.267E-09	.515E-07	
FEB	.639E-06	.447E-04		.189E-09	.968E-07	
MAR	.695E-06	.440E-04		.161E-09	.210E-06	
APR	.416E-06	.435E-04		.354E-08	.244E-06	
MAY	.956E-06	.334E-04		.222E-08	.304E-06	
JUN	.423E-06	.340E-04		.226E-08	.777E-07	
JUL	.596E-06	.215E-04		.205E-08	.288E-07	
AUG	.755E-06	.917E-04		.299E-08	.500E-07	
SEP	.318E-05	.817E-03		.626E-08	.504E-07	
OCT	.160E-05	.219E-03		.438E-08	.536E-07	
NOV	.131E-05	.461E-03		.386E-08	.921E-07	
DEC	.124E-05	.222E-03		.486E-08	.105E-05	
ADJ						
MONTHLY TOTALS	.121E-04	.207E-02		.345E-07	.231E-05	
MONTHLY MAXIMUM CONC.	(CI/DAY) .106E-06	(CI/DAY) .272E-04	(CI/DAY)	(CI/DAY) .209E-09	(CI/DAY) .340E-07	(CI/DAY)
AVERAGE CONC.	.333E-07	.568E-05		.945E-10	.634E-08	

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-P-5			296-P-6		
PLANT CODE	(106-CS)			(102A)		
FACILITY	TANKS 105 AND 106-C			TK-102-A		
FUNCTION	PORTABLE AIR EXHAUSTER FOR THE 105 AND 106-C TANKS IN C FARM.			FILTERED EXHAUST FROM TANK 102-A.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.210E-06	.324E-02				
FEB	.183E-06	.295E-05				
MAR	.353E-06	.186E-05				
APR	.362E-06	.384E-05		.823E-08	.139E-06	
MAY	.227E-06	.248E-05		.151E-07	.578E-05	
JUN	.187E-06	.234E-05		.384E-06	.105E-04	
JUL	.317E-06	.749E-05				
AUG	.300E-06	.296E-05				
SEP	.582E-06	.315E-05				
OCT	.660E-06	.322E-05				
NOV	.808E-06	.738E-05				
DEC	.268E-06	.476E-05				
ADJ				.407E-06 ¹	.164E-04 ¹	
MONTHLY TOTALS	.446E-05	.328E-02		.814E-06	.328E-04	
MONTHLY MAXIMUM CONC.	(CI/DAY) .269E-07	(CI/DAY) .105E-03	(CI/DAY)	(CI/DAY) .128E-07	(CI/DAY) .349E-06	(CI/DAY)
AVERAGE CONC.	.122E-07	.900E-05		.450E-08	.181E-06	

-ADJUSTMENTS ARE FOR THE FIRST THREE MONTHS OF THE YEAR

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RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-P-7			296-P-9		
PLANT CODE	(1098YB)			(TX-5)		
FACILITY	ITS NO. 2			242-TX WASTE EVAP.		
FUNCTION	FILTERED EXHAUST AIR FROM AIR COOLING THE CONCENTRATE IN BY FARM BOTTOM TANK (109-BY).			FILTERED EXHAUST AIR FROM AIR COOLING OF CONCENTRATE RECEIVING TANKS IN TX FARM (113,114,AND 115-TX).		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN				.695E-07	.548E-05	
FEB				.153E-06	.880E-05	
MAR				.233E-06	.521E-05	
APR				.243E-06	.646E-05	
MAY				.389E-06	.551E-05	
JUN				.239E-06	.217E-05	
JUL	.237E-08	.453E-07		.152E-06	.471E-05	
AUG	.209E-08	.441E-07		.143E-06	.203E-05	
SEP				.152E-06	.312E-05	
OCT	.270E-08	.130E-07		.213E-06	.252E-05	
NOV	.385E-08	.336E-07		.261E-07	.841E-06	
DEC				.870E-08	.278E-06	
ADJ						
MONTHLY TOTALS	.110E-07	.136E-06		.202E-05	.471E-04	
MONTHLY MAXIMUM CONC.	(CI/DAY) .135E-08	(CI/DAY) .650E-08	(CI/DAY)	(CI/DAY) .126E-07	(CI/DAY) .314E-06	(CI/DAY)
AVERAGE CONC.	— .192E-09	— .239E-08		.554E-08	.129E-06	

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RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-P-10	296-P-11
PLANT CODE	(TX-7)	(TX-8)
FACILITY	242-TX WASTE EVAP.	242-TX WASTE EVAP.
FUNCTION	FILTERED EXHAUST AIR FROM AIR COOLING THE CONCENTRATE IN TX FARM BOTTOMS TANKS (110, 111, AND 112-TX).	FILTERED EXHAUST AIR FROM AIR COOLING THE CONCENTRATE IN TX FARM BOTTOMS TANK (118-TX).

1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.155E-06	.248E-04		.204E-08	.187E-06	
FEB	.589E-07	.470E-05		.129E-08	.358E-06	
MAR	.816E-07	.899E-05		.125E-08	.483E-07	
APR	.166E-06	.863E-05		.407E-08	.109E-06	
MAY	.901E-07	.815E-05		.151E-08	.476E-06	
JUN	.145E-06	.302E-05		.169E-08	.157E-06	
JUL	.680E-07	.248E-05		.100E-08	.212E-06	
AUG	.101E-06	.320E-05		.155E-08	.317E-06	
SEP	.104E-06	.438E-05		.117E-08	.391E-06	
OCT	.145E-06	.416E-05		.147E-08	.454E-06	
NOV	.689E-07	.249E-05		.789E-08	.301E-06	
DEC	.767E-07	.676E-05		.811E-09	.528E-07	
ADJ						
MONTHLY TOTALS	.126E-05	.818E-04		.257E-07	.306E-05	
MONTHLY MAXIMUM CONC.	(CI/DAY) .553E-08	(CI/DAY) .802E-06	(CI/DAY)	(CI/DAY) .263E-09	(CI/DAY) .154E-07	(CI/DAY)
AVERAGE CONC.	.345E-08	.224E-06		.705E-10	.839E-08	

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-P-12			296-P-13		
PLANT CODE	(TX-9)			(P-13)		
FACILITY	242-TX WASTE EVAP.			242-TX WASTE EVAP.		
FUNCTION	FILTERED EXHAUST AIR FROM AIR COOLING THE CONCENTRATE IN TX FARMS BOTTOMS TANKS (102, 105, AND 106-TX).			FILTERED EXHAUST AIR FROM AIR COOLING THE CONCENTRATE IN THE 103-TX BOTTOMS TANK.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.248E-06	.195E-04		.385E-07	.195E-06	
FEB	.150E-06	.326E-04		.114E-07	.406E-06	
MAR	.139E-06	.174E-04		.261E-07	.441E-06	
APR	.196E-06	.584E-04		.550E-08	.412E-06	
MAY	.189E-06	.598E-04		.171E-07	.370E-06	
JUN	.250E-06	.217E-04		.167E-07	.526E-06	
JUL	.117E-06	.154E-05		.201E-08	.115E-06	
AUG	.235E-06	.348E-04				
SEP	.130E-06	.229E-04				
OCT	.217E-06	.728E-04				
NOV	.171E-06	.490E-04				
DEC	.265E-06	.229E-05				
ADJ						
MONTHLY TOTALS	.231E-05	.393E-03		.117E-06	.247E-05	
MONTHLY MAXIMUM CONC.	(CI/DAY) .855E-08	(CI/DAY) .235E-05	(CI/DAY)	(CI/DAY) .124E-08	(CI/DAY) .175E-07	(CI/DAY)
AVERAGE CONC.	.632E-08	.108E-05		.554E-09	.116E-07	

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	291-S-1			296-S-1		
PLANT CODE	(291-S)			(X-1)		
FACILITY	REDOX (202-S)			REDOX		
FUNCTION	FILTERED AIR FROM CANYON VENTILATION AND VESSEL VENT, AND TREATED DISSOLVER OFF-GAS (PLANT DOWN).			FILTERED AIR FROM SOUTH SAMPLE GALLERY.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.276E-05	.453E-04		.835E-08	.137E-06	
FEB	.103E-05	.407E-04		.334E-07	.230E-05	
MAR	.484E-05	.408E-03		.117E-07	.184E-06	
APR	.590E-05	.497E-04		.167E-07	.834E-06	
MAY	.468E-05	.196E-03		.187E-06	.123E-05	
JUN	.227E-05	.332E-04		.217E-07	.186E-06	
JUL	.240E-05	.324E-04		.650E-07	.447E-06	
AUG	.504E-05	.391E-04		.668E-08	.108E-06	
SEP	.570E-05	.360E-04		.200E-07	.429E-06	
OCT	.261E-05	.344E-04		.529E-07	.272E-06	
NOV	.277E-05	.461E-04		.117E-07	.199E-06	
DEC	.184E-05	.206E-04		.501E-08	.227E-06	
ADJ						
MONTHLY TOTALS	.418E-04	.981E-03		.440E-06	.655E-05	
MONTHLY MAXIMUM CONC.	(CI/DAY) .197E-06	(CI/DAY) .132E-04	(CI/DAY)	(CI/DAY) .603E-08	(CI/DAY) .821E-07	(CI/DAY)
AVERAGE CONC.	.115E-06	.269E-05		.121E-08	.180E-07	

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-S-2			296-S-4			
PLANT CODE	(X-2)			(EF-3)			
FACILITY	REDOX			REDOX			
FUNCTION	FILTERED AIR FROM NORTH SAMPLE GALLERY AND SAMPLER HOODS.			FILTERED AIR FROM DECONTAMIN- ATION ROOM AND REGULATED SHOP. UNFILTERED AIR FROM REGULATED TOOLROOM, LOW-LEVEL DECONTAM- INATION SINK, AND SWP LOBBY.			
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)	
JAN	.282E-07	.119E-06		.181E-07	.431E-05		
FEB	.217E-07	.301E-06		.276E-06	.510E-05		
MAR	.217E-07	.168E-05		.794E-07	.409E-05		
APR	.868E-08	.267E-06		.143E-06	.101E-04		
MAY	.103E-06	.709E-06		.627E-07	.660E-05		
JUN	.233E-07	.136E-06		.145E-07	.696E-05		
JUL	.314E-07	.983E-06		.304E-06	.621E-05		
AUG	.326E-07	.165E-06		.281E-06	.281E-05		
SEP	.181E-07	.311E-06		.373E-06	.459E-05		
OCT	.284E-07	.232E-06		.585E-06	.563E-05		
NOV	.195E-07	.902E-07		.293E-06	.255E-05		
DEC	.500E-07	.625E-07		.173E-06	.434E-05		
ADJ							
MONTHLY TOTALS	.391E-06	.505E-05		.260E-05	.633E-04		
MONTHLY MAXIMUM CONC.	(CI/DAY) .331E-09	(CI/DAY) .541E-07	(CI/DAY)	(CI/DAY) .189E-07	(CI/DAY) .337E-06	(CI/DAY)	
AVERAGE CONC.	.107E-08	.138E-07		.713E-08	.173E-06		

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RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-S-5			296-S-6		
PLANT CODE	(PP-33)			(8-X)		
FACILITY	REDOX (202-S)			REDOX		
FUNCTION	FILTERED AIR FROM THE PRODUCT REMOVAL CAGE.			UNFILTERED AIR FROM THE SILO GALLERY, ORGANIC FEED TANK, AND SAMPLE ELEVATOR.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.154E-06	.444E-06		.163E-06	.104E-04	
FEB	.164E-06	.149E-04		.703E-06	.986E-05	
MAR	.179E-06	.482E-05		.267E-06	.107E-04	
APR	.560E-07	.212E-06		.391E-06	.107E-04	
MAY	.187E-06	.484E-06		.844E-06	.114E-04	
JUN	.216E-06	.329E-06		.282E-06	.729E-05	
JUL	.117E-06	.274E-06		.213E-06	.708E-05	
AUG	.146E-06	.228E-06		.895E-07	.953E-05	
SEP	.260E-06	.342E-06		.125E-05	.705E-05	
OCT	.685E-06	.556E-06		.238E-06	.272E-04	
NOV	.147E-06	.229E-06		.293E-06	.524E-05	
DEC	.155E-06	.219E-06		.360E-06	.597E-05	
ADJ						
MONTHLY TOTALS	.246E-05	.230E-04		.510E-05	.122E-03	
MONTHLY MAXIMUM CONC.	(CI/DAY) .221E-07	(CI/DAY) .532E-06	(CI/DAY)	(CI/DAY) .417E-07	(CI/DAY) .876E-06	(CI/DAY)
AVERAGE CONC.	.675E-08	.631E-07		.140E-07	.335E-06	

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RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-S-7			296-S-13		
PLANT CODE	(KX-34)			(S-13)		
FACILITY	REDOX-PU PROCESSING			222-S LABORATORY		
FUNCTION	FILTERED GREEN HOUSE VENTILATION AND PROCESS VESSEL VENT AIR FROM 233-S (PLANT DOWN).			FILTERED AIR FROM HOODS, GLOVE BOXES, HOT CELLS, AND VENTILATION.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.673E-05	.750E-05		.659E-05	.329E-03	
FEB	.126E-04	.488E-05		.193E-05	.288E-03	
MAR	.430E-05	.287E-05		.567E-05	.256E-03	
APR	.116E-04	.108E-04		.384E-05	.136E-03	
MAY	.255E-05	.928E-05		.367E-05	.179E-03	
JUN	.339E-06	.906E-05		.681E-05	.132E-03	
JUL	.101E-05	.266E-05		.474E-05	.206E-03	
AUG	.194E-05	.316E-05		.188E-04	.810E-04	
SEP	.106E-05	.382E-05		.936E-05	.498E-04	
OCT	.831E-05	.269E-05		.637E-05	.414E-04	
NOV	.472E-05	.534E-05		.344E-05	.615E-04	
DEC	.250E-05	.502E-05		.517E-05	.311E-04	
ADJ						
MONTHLY TOTALS	.577E-04	.671E-04		.764E-04	.179E-02	
MONTHLY MAXIMUM CONC.	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)
	.452E-06	.361E-06		.606E-06	.106E-04	
AVERAGE CONC.	.158E-06	.184E-06		.209E-06	.490E-05	

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-S-14			296-S-15		
PLANT CODE	(S-14)			(S-15)		
FACILITY	241-SX TANK FARM			241-SX TANK FARM		
FUNCTION	FILTERED NONCONDENSIBLE VAPORS FROM WASTE STORAGE TANKS IN 241-SX TANK FARM.			FILTERED EXHAUST AIR FROM AIR COOLING OF DRIED SLUDGE IN SX FARM TANKS (107, 108, 109, AND 112-SX).		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.513E-06	.301E-05		.185E-07	.217E-04	
FEB	.463E-06	.346E-05		.872E-08	.219E-04	
MAR	.479E-06	.411E-05		.619E-07	.479E-04	
APR	.552E-06	.405E-04		.455E-07	.289E-04	
MAY	.514E-06	.446E-05		.408E-07	.141E-04	
JUN	.446E-06	.469E-05		.361E-07	.339E-04	
JUL	.443E-06	.378E-05		.360E-07	.100E-04	
AUG	.554E-06	.404E-05		.456E-07	.931E-05	
SEP	.442E-06	.443E-05		.566E-07	.156E-04	
OCT	.631E-06	.396E-05		.599E-07	.267E-04	
NOV	.622E-06	.823E-05		.242E-07	.585E-04	
DEC	.916E-06	.832E-05		.278E-07	.192E-04	
ADJ						
MONTHLY TOTALS	.658E-05	.929E-04		.461E-06	.308E-03	
MONTHLY MAXIMUM CONC.	(CI/DAY) .295E-07	(CI/DAY) .135E-05	(CI/DAY)	(CI/DAY) .200E-08	(CI/DAY) .195E-05	(CI/DAY)
AVERAGE CONC.	.180E-07	.255E-06		.126E-08	.842E-06	

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-S-16			296-S-18			
PLANT CODE	(219-S)			(DETK11)			
FACILITY	222-S LAB STORAGE			242-S WASTE EVAP.			
FUNCTION	FILTERED EXHAUST AIR FROM 291-S VAULT AND WASTE TANKS.			FILTERED AIR FROM THE 242-S WASTE EVAPORATOR FACILITY.			
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)	
JAN	.254E-07	.665E-04					
FEB	.763E-08	.229E-05					
MAR	.517E-08	.214E-05					
APR	.360E-09	.153E-05					
MAY	.154E-07	.874E-06					
JUN	.330E-07	.596E-06					
JUL	.159E-07	.364E-05					
AUG	.257E-06	.867E-05					
SEP	.501E-06	.205E-05					
OCT	.954E-07	.240E-05					
NOV	.385E-07	.453E-05		.310E-06	.372E-05		
DEC	.283E-07	.327E-05		.650E-06	.276E-05		
ADJ							
MONTHLY TOTALS	.102E-05	.985E-04		.959E-06	.647E-05		
MONTHLY MAXIMUM CONC.	(CI/DAY) .167E-07	(CI/DAY) .214E-05	(CI/DAY)	(CI/DAY) .210E-07	(CI/DAY) .124E-06	(CI/DAY)	
AVERAGE CONC.	.280E-08	.270E-06		.157E-07	.106E-06		

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-S-19			296-S-22		
PLANT CODE	(REAS5)			(DETK15)		
FACILITY	242-S WASTE EVAP.			102-S TANK		
FUNCTION	FILTERED AIR FROM THE 242-S CELL AND VESSEL VENT.			FILTERED OFF GAS FROM PROCESS TANK EXHAUSTER.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN						
FEB						
MAR						
APR						
MAY						
JUN						
JUL						
AUG						
SEP						
OCT						
NOV	.718E-08	.943E-07		.266E-07	.757E-06	
DEC	.866E-08	.871E-07		.234E-07	.121E-05	
ADJ						
MONTHLY TOTALS	.158E-07	.181E-06		.500E-07	.196E-05	
MONTHLY MAXIMUM CONC.	(CI/DAY) .279E-09	(CI/DAY) .314E-08	(CI/DAY)	(CI/DAY) .887E-09	(CI/DAY) .389E-07	(CI/DAY)
AVERAGE CONC.	.260E-09	.297E-08		.820E-09	.322E-07	

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	291-T-1			296-T-1		
PLANT CODE	(291-T)			(TX-1)		
FACILITY	T PLANT			242-T WASTE EVAP.		
FUNCTION	VENTILATION AIR FROM 221-T CANYON.			UNFILTERED AIR FROM HOT SIDE CELLS.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.178E-04	.244E-03		.234E-07	.653E-03	
FEB	.472E-05	.668E-04		.442E-07	.231E-03	
MAR	.525E-05	.643E-04		.115E-06	.239E-03	
APR	.125E-04	.111E-03		.498E-07	.488E-04	
MAY	.419E-05	.386E-04		.333E-06	.392E-03	
JUN	.482E-05	.453E-04		.145E-04	.123E-03	
JUL	.233E-05	.267E-04				
AUG	.410E-05	.500E-04				
SEP	.889E-05	.741E-04				
OCT	.211E-04	.131E-03				
NOV	.846E-05	.807E-04				
DEC	.912E-05	.222E-03				
ADJ						
MONTHLY TOTALS	.103E-03	.115E-02		.151E-04	.174E-02	
MONTHLY MAXIMUM CONC.	(CI/DAY) .682E-06	(CI/DAY) .786E-05	(CI/DAY)	(CI/DAY) .484E-06	(CI/DAY) .211E-04	(CI/DAY)
AVERAGE CONC.	.283E-06	.316E-05		.834E-07	.959E-05	

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-T-2			296-T-3		
PLANT CODE	(TX-2)			(TX-6)		
FACILITY	242-T WASTE EVAP.			242-T WASTE EVAP.		
FUNCTION	UNFILTERED AIR FROM CONDENSATE CATCH TANK CELL (COLD CELL).			FILTERED EXHAUST AIR FROM THE 242-T EVAPORATOR VESSEL VENT.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.374E-07	.422E-04		.431E-07	.660E-03	
FEB	.318E-07	.304E-04		.247E-07	.785E-04	
MAR	.453E-07	.136E-04		.668E-08	.987E-05	
APR	.529E-07	.414E-05		.303E-07	.115E-05	
MAY	.494E-07	.518E-05		.106E-07	.421E-06	
JUN	.158E-06	.438E-05		.215E-07	.127E-05	
JUL	.460E-07	.964E-06		.182E-07	.238E-05	
AUG	.540E-07	.158E-05		.398E-07	.126E-04	
SEP	.111E-06	.183E-05		.281E-07	.735E-05	
OCT	.163E-06	.470E-05		.308E-07	.835E-05	
NOV	.151E-06	.105E-04		.190E-07	.329E-05	
DEC	.147E-06	.107E-04		.766E-08	.122E-05	
ADJ						
MONTHLY TOTALS	.105E-05	.130E-03		.280E-06	.787E-03	
MONTHLY MAXIMUM CONC.	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)
	.526E-08	.136E-05		.139E-08	.213E-04	
AVERAGE CONC.	.286E-08	.357E-06		.768E-09	.216E-05	

RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-T-12			296-T-13		
PLANT CODE	(NO 4-5)			(221-T)		
FACILITY	224-T			T PLANT		
FUNCTION	FILTERED EXHAUSTERS FOR 224-T BUILDING.			VENTILATION AIR.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN				.226E-05	.858E-04	
FEB				.551E-05	.540E-04	
MAR				.186E-05	.449E-04	
APR				.283E-05	.365E-03	
MAY				.172E-05	.256E-02	
JUN				.352E-05	.324E-04	
JUL				.279E-05	.464E-04	
AUG	.232E-06	.303E-05		.295E-05	.404E-04	
SEP				.193E-05	.107E-04	
OCT	.224E-06	.277E-05				
NOV	.108E-06	.103E-05				
DEC	.124E-06	.765E-06				
ADJ	.135E-05 ¹	.149E-04 ¹				
MONTHLY TOTALS	.204E-05	.225E-04		.254E-04	.324E-02	
MONTHLY MAXIMUM CONC.	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)	(CI/DAY)
	.749E-08	.977E-07		.197E-06	.827E-04	
AVERAGE CONC.	—	—		.929E-07	.119E-04	

¹ADJUSTMENT IS FOR JANUARY THROUGH JULY AND SEPTEMBER

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RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-T-16			291-U-1		
PLANT CODE	(242TB)			(291-U)		
FACILITY	242-TA VAULT			U PLANT		
FUNCTION	FILTERED AIR FROM THE 242-TA VAULT AND FROM 242-T HOT CELLS.			FILTERED AIR FROM 221-U CANYON VENTILATION AND HOT SIDE OF 241-WR VAULT.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN				.110E-05	.213E-03	
FEB				.159E-05	.204E-03	
MAR				.221E-05	.988E-04	
APR				.989E-06	.605E-04	
MAY	.636E-08	.180E-06		.211E-05	.631E-04	
JUN	.731E-07	.148E-05		.540E-06	.424E-04	
JUL	.281E-06	.215E-04		.124E-05	.381E-04	
AUG	.348E-06	.444E-05		.936E-06	.304E-04	
SEP	.206E-06	.353E-05		.116E-05	.191E-04	
OCT	.451E-06	.992E-05		.177E-05	.174E-04	
NOV	.202E-06	.136E-05		.912E-06	.128E-03	
DEC	.978E-06	.141E-05		.787E-06	.363E-04	
ADJ						
MONTHLY TOTALS	.254E-05	.438E-04		.153E-04	.951E-03	
MONTHLY MAXIMUM CONC.	(CI/DAY) .315E-07	(CI/DAY) .693E-06	(CI/DAY)	(CI/DAY) .712E-07	(CI/DAY) .730E-05	(CI/DAY)
AVERAGE CONC.	.104E-07	.179E-06		.420E-07	.261E-05	

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RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	296-U-6			296-U-10			
PLANT CODE	(WRV)			(271-U)			
FACILITY	241-WR VAULT			271-U PU STORAGE			
FUNCTION	241-WR VAULT EXHAUST.			FILTERED EXHAUST THIRD FLOOR PLUTONIUM STORAGE AREA.			
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)	
JAN				.127E-07	.131E-06		
FEB				.381E-07	.259E-06		
MAR				.127E-07	.141E-06		
APR				.212E-07	.177E-06		
MAY	.257E-05	.392E-03		.111E-07	.111E-06		
JUN	.255E-05	.291E-03		.303E-07	.147E-06		
JUL				.101E-07	.127E-06		
AUG				.202E-07	.255E-06		
SEP				.202E-07	.106E-06		
OCT				.253E-07	.203E-06		
NOV				.202E-07	.493E-06		
DEC				.303E-07	.248E-06		
ADJ							
MONTHLY TOTALS	.512E-05	.683E-03		.252E-06	.240E-05		
MONTHLY MAXIMUM CONC.	(CI/DAY) .851E-07	(CI/DAY) .126E-04	(CI/DAY)	(CI/DAY) .136E-08	(CI/DAY) .164E-07	(CI/DAY)	
AVERAGE CONC.	.840E-07	.112E-04		.691E-09	.657E-08		

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RADIOACTIVE GASEOUS WASTE - MONTHLY DATA - 1973

STACK NO.	291-Z-1			296-Z-3		
PLANT CODE	(291-Z)			(241-Z)		
FACILITY	Z PLANT			241-Z VAULT		
FUNCTION	FILTERED PROCESS AND VENTILATION AIR FROM 234-5, 232-Z, 236-Z, AND 242-Z.			FILTERED AIR FROM 241-Z SUMP AND VESSEL VENTS.		
1973	ALPHA (CI)	BETA (CI)	I-131 (CI)	ALPHA (CI)	BETA (CI)	I-131 (CI)
JAN	.651E-04	.482E-04		.533E-07	.768E-07	
FEB	.466E-04	.555E-04		.268E-07	.120E-06	
MAR	.218E-04	.838E-04		.116E-06	.855E-07	
APR	.120E-04	.868E-04		.366E-08	.788E-07	
MAY	.885E-05	.668E-04		.277E-06	.135E-06	
JUN	.114E-04	.994E-04		.105E-06	.166E-06	
JUL	.236E-04	.129E-03		.816E-06	.104E-05	
AUG	.228E-04	.207E-03		.185E-06	.902E-06	
SEP	.176E-04	.983E-04		.232E-06	.523E-06	
OCT	.686E-04	.485E-03		.265E-05	.874E-06	
NOV	.743E-04	.218E-03		.322E-04	.348E-05	
DEC	.295E-04	.150E-03		.270E-05	.121E-05	
ADJ						
MONTHLY TOTALS	.402E-03	.173E-02		.394E-04	.869E-05	
MONTHLY MAXIMUM CONC.	(CI/DAY) .248E-05	(CI/DAY) .156E-04	(CI/DAY)	(CI/DAY) .107E-05	(CI/DAY) .116E-06	(CI/DAY)
AVERAGE CONC.	.110E-05	.473E-05		.108E-06	.238E-07	

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