

7904170 2/2

Rochester Gas & Electric Corp.

Rochester Gas & Electric Corp.

II AIRBORNE RELEASES

1978

Airborne Releases

1978

	UNITS	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1. TOTAL NOBLE GASES	CURIES	18.347	63.940	129.299	96.978	25.625	58.422
2. TOTAL HALOGENS	CURIES	2.39E-4	1.27E-3	1.4E-3	1.72E-3	2.41E-3	2.11E-3
3. TOTAL PARTICULATE CROSS RADIOACTIVITY (B,Y)	CURIES						
		3.02E-6	4.35E-7	3.01E-7	4.18E-7	7.41E-7	8.5E-9
4. TOTAL TRITIUM	CURIES	5.23	5.413	2.964	1.852	1.962	2.29
5. TOTAL PARTICULATE CROSS ALPHA RADIOACTIVITY	CURIES	ND	ND	ND	1.4E-9	1.7E-8	8.5E-9
6. MAXIMUM NOBLE GAS RELEASE RATE	UCI/SEC	374	306	2700	177	272	1200
7. PERCENT OF APPLICABLE LIMIT FOR:							
A. NOBLE GASSES	%	.010	.030	.132	.064	.021	.030
B. HALOGENS	%	.230	.934	.076	.876	1.172	1.25
C. PARTICULATES	%	<.001	<.001	<.001	<.001	<.001	<.001
8. ISOTOPE RELEASED:	CURIES						
PARTICULATES							
CS-137		1.45E-6	7.05E-8	1.94E-7	2.46E-7	4.7E-7	2.21E-7
CO-58		2.82E-7	ND	ND	ND	ND	ND
CO-60		7.36E-7	ND	3.12E-7	ND	ND	6.0E-8
CS-134		3.03E-7	6.48E-8	ND	ND	2.7E-7	1.12E-7
CE-147		ND	ND	3.29E-7	1.72E-7	ND	ND
CE-144		ND	ND	3.29E-7	1.72E-7	ND	ND
HALOGENS							
I-131		1.85E-4	7.26E-4	.0007	6.8E-4	8.81E-4	1.03E-3
I-133		5.38E-5	5.50E-4	.0007	1.04E-3	1.53E-3	1.08E-3
I-135							
GASES							
KR-85		ND	.191	.0904	83.166	.137	.126
XE-133		11.400	56.593	127.424	11.457	21.935	53.38
KR-88							
KR-87							
KR-85M		.099	.086	.0004	.157	.181	.017
XL-130			ND	.0170	ND		ND
XL-135M		1.617	1.465	1.6074	1.949	3.353	2.53
XE-135		ND	ND	.0637	.247	.012	.062
AR-41							
OTHERS AS APPROPRIATE (SPECIFY)							
XE-133M		ND	ND	.0006	ND	.0001	ND
XE-131M		ND	ND	.0157	ND	.005	.015
ZR-95							
ND-95		2.51E-7	ND	ND	ND	ND	ND
CR-51							
RU-103							
FE-59							
MI-54							
TE-132							

ND - None Detected

1. LIQUID RELEASES

	UNITS	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1. GROSS RADIOACTIVITY (D.Y.)							
A) TOTAL RELEASE	CURIES	0.000777	0.004857	0.00156	0.00089	0.00231	0.00116
B) AVERAGE CONCENTRATION RELEASED	UCI/ML	1.15E-11	7.19E-11	2.38E-11	1.31 E-11	3.56 E-11	1.95 E-11
C) MAXIMUM CONCENTRATION RELEASED	UCI/ML	6.78E-9	5.84E-9	9.68E-9	2.99 E-9	2.84 E-9	3.60 E-9
2. TRITIUM							
A) TOTAL RELEASE	CURIES	10.419	12.656	6.748	17.398	10.755	9.545
B) AVERAGE CONCENTRATION RELEASED	UCI/ML	1.54 E-7	1.87E-7	1.03E-7	2.57 E-7	1.66 E-7	1.61 E-7
3. DISSOLVED NOBLE GASES							
A) TOTAL RELEASE	CURIES	ND	ND	ND	ND	ND	ND
B) AVERAGE CONCENTRATION RELEASED	UCI/ML						
4. GROSS ALPHA RADIOACTIVITY							
A) TOTAL RELEASE	CURIES	ND	ND	ND	ND	1.2 E-6	ND
B) AVERAGE CONCENTRATION RELEASED	UCI/ML					1.85 E-14	
5. VOLUME OF LIQUID WASTE TO DISCHARGE CANAL	LITERS						
6. VOLUME OF DILUTION WATER	LITERS	6.95E4	7.42E5	2.78E5	9.25 E4	7.08E4	9.09 E4
7. ISOTOPES RELEASED	CURIES	6.76E10	6.76E10	6.54E10	6.76E10	6.49E10	5.94 E10
DA LA-140		ND	ND	ND	ND	ND	ND
I-131		5.3E-6	3.7E-6	4.33E-5	ND	ND	6.54 E-6
I-133		ND	ND	ND	ND	ND	ND
HO-99		ND	ND	ND	6.16E-5	2.36E-5	3.12 E-6
CS-137		2.97E-4	3.63E-3	5.88E-4	2.91E-4	1.25E-3	7.16 E-4
CS-134		5.38E-5	4.59E-4	9.22E-5	6.24E-5	7.44E-4	3.75 E-4
CO-60		1.85E-4	6.44E-4	2.54E-4	1.25E-4	1.40E-4	3.07 E-5
CO-58		2.16E-4	6.09E-5	3.68E-5	1.00E-5	3.96E-6	1.32 E-5
MN-54		4.1E-6	ND	ND	ND	4.94E-6	ND
NB-95		6.1E-6	ND	2.26E-5	ND	1.98E-5	ND
AG-110 m		ND	2.31E-5	3.58E-5	1.63E-4	8.93E-6	ND
CE-PR-144		ND	ND	2.13E-4	ND	9.92E-6	ND
8. PERCENT OF TECHNICAL SPECIFICATION LIMIT FOR TOTAL ACTIVITY RELEASED	%	<0.0001	<.001	<.001	<.001	<.001	<.001
RU-103		ND	4.7E-6	3.61E-5	1.53E-6	ND	ND
ZR-95		1.06E-5	ND	1.80E-6	ND	4.43E-6	ND
TE-132		ND	ND	3.87E-5	ND	1.51E-6	5.19 E-6
SB-125		ND	ND	1.25E-4	1.73E-4	4.88E-5	ND
CE-141		ND	ND	7.08E-5	ND	3.12E-5	9.25 E-6

ND = None Detected

SHIPMENTS OF SOLID WASTE

		<u>Cu. Feet</u>	<u>Curies</u>
2 August 1978	to Barnwell, South Carolina	1152	29.78
21 August 1978	to Barnwell, South Carolina		
30 August 1978	to Barnwell, South Carolina		
21 September 1978	to Barnwell, South Carolina	484	1.68
3 November 1978	to Barnwell, South Carolina	468	4.46

