

ATTACHMENT A (Page 1 of 5)

EFFLUENT & WASTE DISPOSABLE SEMI-ANNUAL REPORT

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

Period: July through December

1995

A. FISSION & ACTIVATION GASES	UNIT	THIRD QUARTER	FOURTH QUARTER	Est.Total Error %
1. Total Release	Ci	1.30E+1	1.64E+01	12.4
2. Average release rate for the period	μCi/sec	1.64E00	2.06E00	
3. *Percent of ODCM limit Chimney & Stack	%	5.05E-03	6.72E-03	
		2.21E-04	2.84E-04	

B. IODINE				
1. Total Iodine-131	Ci	7.47E-04	8.14E-04	40.0
2. Average release rate for the period	μCi/sec	9.40E-05	1.02E-04	

C. PARTICULATES				
1. Particulates with half-lives >8 days	Ci	5.07E-03	1.13E-02	39.1
2. Average release rate for the period	μCi/sec	6.38E-04	1.42E-03	
3. Gross alpha radioactivity	Ci	2.66E-06	6.35E-06**	

D. TRITIUM				
1. Total Release	Ci	1.07E+01	1.07E+01	6.2
2. Average release rate for the period	μCi/sec	1.35E00	1.35E00	

E. Iodine 131 & 133, Tritium & Particulate				
1. Percent of ODCM limit Chimney & Stack	%	2.54E-01	1.80E-01	

* NOBLE GAS GAMMA/NOBLE GAS BETA DOSE LIMITS
** BASED ON PREVIOUS SIX MONTHS AVAILABLE DATA.

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PDR ADOCK 05000254
R PDR

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EFFLUENT & WASTE DISPOSABLE SEMI-ANNUAL REPORT

MAIN CHIMNEY GASEOUS EFFLUENTS

CONTINUOUS MODE

BATCH MODE

NUCLIDES RELEASED 1. Fission gases	UNIT	THIRD QUARTER	FOURTH QUARTER	THIRD QUARTER	FOURTH QUARTER
Kr-85	ci	<LLD	<LLD	N/A	N/A
Kr-85m	ci	1.75E00	2.51E00		
Kr-87	ci	3.90E-01	5.63E-01		
Kr-88	ci	1.88E00	3.47E00		
Xe-133	ci	2.18E00	2.46E00		
Xe-135	ci	9.61E-01	4.27E-01		
Xe-135m	ci	9.36E-01	1.21E00		
Xe-138	ci	3.85E00	4.45E00		
Ar-41	ci	1.02E00	1.26E00		
Total for Period	ci	1.30E+01	1.64E+01		
NUCLIDES RELEASED 2. Iodines	UNIT	THIRD QUARTER	FOURTH QUARTER	THIRD QUARTER	FOURTH QUARTER
I-131	ci	7.47E-04	8.14E-04	N/A	N/A
I-133	ci	5.79E-03	5.90E-03		
I-135	ci	4.65E-03	5.08E-03		
Total for period	ci	1.12E-02	1.18E-02		
NUCLIDES RELEASED 3. Particulates	UNIT	THIRD QUARTER	FOURTH QUARTER	THIRD QUARTER	FOURTH QUARTER
Sr-89*	ci	7.87E-05	1.38E-04	N/A	N/A
Sr-90*	ci	<LLD	<LLD		
Cs-134	ci	<LLD	<LLD		
Cs-137	ci	<LLD	3.24E-05		
Ba-140	ci	8.66E-05	<LLD		
La-140	ci	3.88E-05	6.35E-05		
Cr-51	ci	6.85E-04	5.01E-03		
Mn-54	ci	6.74E-04	5.56E-04		
Co-58	ci	2.97E-04	3.14E-04		
Co-60	ci	1.87E-03	3.08E-03		
Mo-99	ci	5.78E-04	8.61E-04		
Ag-110m	ci	<LLD	5.37E-05		
Sb-124		1.17E-05	<LLD		
Zn-65		<LLD	3.41E-05		
Total for Period	ci	4.32E-03	1.01E-02		

* BASED ON PREVIOUS SIX MONTHS DATA.

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EFFLUENT & WASTE DISPOSABLE SEMI-ANNUAL REPORT

REACTOR VENTILATION GASEOUS EFFLUENTS
CONTINUOUS MODE

BATCH MODE

NUCLIDES RELEASED 1. Fission gases	UNIT	THIRD QUARTER	FOURTH QUARTER	THIRD QUARTER	FOURTH QUARTER
Kr-85	Ci	<LLD	<LLD	N/A	N/A
Kr-85m	Ci	<LLD	<LLD		
Kr-87	Ci	<LLD	<LLD		
Kr-88	Ci	<LLD	<LLD		
Xe-133	Ci	<LLD	<LLD		
Xe-135	Ci	<LLD	<LLD		
Xe-135m	Ci	<LLD	<LLD		
Xe-138	Ci	<LLD	<LLD		
Total for Period	Ci	<LLD	<LLD		
NUCLIDES RELEASED 2. Iodines	UNIT	THIRD QUARTER	FOURTH QUARTER	THIRD QUARTER	FOURTH QUARTER
I-131	Ci	<LLD	<LLD	N/A	N/A
I-133	Ci	<LLD	<LLD		
I-135	Ci	<LLD	<LLD		
Total for period	Ci	<LLD	<LLD		
NUCLIDES RELEASED 3. Particulates	UNIT	THIRD QUARTER	FOURTH QUARTER	THIRD QUARTER	FOURTH QUARTER
Sr-89*	Ci	2.48E-05	6.56E-06	N/A	N/A
Sr-90*	Ci	<LLD	<LLD		
Cs-134	Ci	<LLD	<LLD		
Cs-137	Ci	7.67E-06	1.38E-05		
Ba-140	Ci	<LLD	<LLD		
La-140	Ci	<LLD	<LLD		
Cr-51	Ci	<LLD	1.36E-04		
Mn-54	Ci	<LLD	<LLD		
Co-58	Ci	<LLD	<LLD		
Co-60	Ci	7.18E-04	9.97E-04		
Mo-99	Ci	<LLD	<LLD		
Ag-110m	Ci	<LLD	<LLD		
I-131	Ci	<LLD	<LLD		
I-133	Ci	<LLD	<LLD		
Total for Period	Ci	7.50E-04	1.15E-03		

* Projected value based on previous six months available data.

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EFFLUENT & WASTE DISPOSABLE SEMI-ANNUAL REPORT

LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

A. FISSION & ACTIVATION GASES	UNIT	THIRD QUARTER	FOURTH QUARTER	Est.Total Error %
1. Total Release (not including tritium, gases & alpha)	Ci	2.53E-03	3.91E-03	5.5
2. Average diluted concentration during batch discharges for the period	μCi/mL	2.50E-10	4.61E-10	
3. Percent of applicable limit*	%	1.25E-03	1.43E-03	
		5.22E-04	7.84E-04	
4. Maximum diluted concentration during batch discharges	μCi/mL	4.47E-10	8.65E-10	
B. TRITIUM				
1. Total Release	Ci	5.56E00	5.16E00	4.0
2. Average diluted concentration during batch discharges for the period	μCi/mL	5.50E-07	6.08E-07	
3. Percent of applicable limit	%	1.83E-02	2.03E-02	
C. DISSOLVED & ENTRAINED GASES				
1. Total Release	Ci	3.23E-05	4.49E-04	5.5
2. Average diluted concentration during batch discharges for the period	μCi/mL	3.20E-12	5.29E-11	
3. Percent of applicable limit	%	1.60E-06	2.64E-05	
D. GROSS ALPHA ACTIVITY				
1. Total Release	Ci	<LLD	<LLD	14.5
2. Average diluted concentration during batch discharges for the period	μCi/mL	<LLD	<LLD	
E. VOLUME OF WASTE RELEASED (prior to dilution)	Liters	1.31E+06	1.42E+06	
F. VOLUME OF DILUTION WATER USED DURING BATCH DISCHARGES	Liters	1.01E+10	8.49E+09	
G. TOTAL VOLUME OF DILUTION WATER USED DURING PERIOD (quarter)	Liters	3.78E+11	3.60E+11	

* Whole Body/Organ (ODCM)

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EFFLUENT & WASTE DISPOSABLE SEMI-ANNUAL REPORT

LIQUID EFFLUENTS

NUCLIDES RELEASED	UNIT	CONTINUOUS MODE		BATCH MODE	
		THIRD QUARTER	FOURTH QUARTER	THIRD QUARTER	FOURTH QUARTER
Sr-89	Ci	<LLD	<LLD	<LLD	<LLD
Sr-90	Ci	7.20E-08	8.12E-09	2.09E-06	6.02E-06
Cs-134	Ci	<LLD	<LLD	<LLD	<LLD
Cs-137	Ci	3.96E-06	4.46E-07	1.33E-04	4.82E-04
I-131	Ci	<LLD	<LLD	<LLD	<LLD
Co-60	Ci	4.24E-06	3.97E-06	1.59E-03	2.26E-03
Co-58	Ci	<LLD	<LLD	<LLD	<LLD
Fe-59	Ci	<LLD	<LLD	<LLD	<LLD
Zn-65	Ci	<LLD	<LLD	<LLD	<LLD
Mn-54	Ci	<LLD	<LLD	9.32E-05	1.70E-04
Cr-51	Ci	<LLD	<LLD	<LLD	<LLD
Zr-95	Ci	<LLD	<LLD	<LLD	<LLD
Nb-95	Ci	<LLD	<LLD	<LLD	<LLD
Mo-99	Ci	<LLD	<LLD	<LLD	<LLD
Ag-110m	Ci	<LLD	<LLD	1.18E-05	<LLD
Ba-140	Ci	<LLD	<LLD	<LLD	<LLD
La-140	Ci	<LLD	<LLD	<LLD	<LLD
Fe-55	Ci	3.28E-07	3.08E-07	7.03E-04	9.97E-04
Unidentified	Ci				
Total for Period (above)	Ci	8.60E-06	4.73E-06	2.53E-03	3.91E-03
Xe-133	Ci	<LLD	<LLD	3.23E-05	4.25E-04
Xe-135	Ci	<LLD	<LLD	<LLD	2.39E-05

Prepared by: _____

Date: 2/19/96

Approved by: _____

Date: 2/22/96

July-September 1995
196-33 ft. DIFFERENTIAL TEMPERATURE

SPEED CLASS	WIND DIRECTION CLASSES																TOTAL	STABILITY CLASSES							TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		EU	MU	SU	N	SS	MS	ES	
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						
3 SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					
A N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				
L SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				
M MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			
ES	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05			
																						.05			
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.05							
1 SU	.05	.00	.00	.00	.00	.00	.00	.00	.00	.05	.05	.05	.05	.00	.00	.00	.23		.23						
- N	.27	.00	.09	.23	.09	.14	.23	.18	.50	.32	.41	.59	.09	.32	.14	.05	3.62		3.62						
3 SS	.18	.14	.27	.59	1.22	.82	1.18	.95	.82	.68	1.09	.82	.86	.45	.68	.41	11.15		11.15						
MS	.44	.44	.39	.71	1.59	2.19	2.14	1.82	1.59	.94	.57	.21	.71	.85	.34	.25	15.18		15.18						
ES	.28	.43	.43	.89	2.56	2.87	1.39	.73	.63	.48	.07	.23	.28	.48	.12	.18	12.05		12.05						
																						42.27			
EU	.41	.41	.00	.05	.00	.05	.23	.95	.27	1.63	.63	.63	.41	.82	.72	.41	7.61	7.61							
MU	.09	.00	.14	.00	.09	.00	.09	.32	.18	.50	.32	.27	.00	.36	.05	.27	2.67	2.67							
4 SU	.05	.05	.05	.18	.09	.14	.41	.72	.45	1.31	.59	.32	.18	.23	.23	.32	5.30		5.30						
- N	1.04	.27	.32	.36	.77	1.54	1.81	1.50	1.04	2.58	1.86	.59	.50	.54	.63	.63	15.99		15.99						
7 SS	.50	.18	.09	.23	.36	1.13	1.18	.45	.86	1.95	3.13	1.09	1.54	.36	.86	.91	14.82		14.82						
MS	.05	.05	.05	.05	.09	.18	.32	.05	.27	.09	.05	.00	.05	.27	.05	.14	1.72		1.72						
ES	.00	.00	.00	.05	.00	.00	.09	.05	.05	.00	.00	.00	.00	.05	.05	.00	.32		.32						
																						48.44			
EU	.50	.27	.09	.00	.00	.05	.09	.14	.05	.18	.18	.09													

July-September 1995
196-33 ft. DIFFERENTIAL TEMPERATURE

SPEED CLASS	WIND DIRECTION CLASSES																STABILITY CLASSES								
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						
9 SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00				
N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				.00			
2 SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					.00		
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00	
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00	
																								.00	
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						
6 MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					
7 SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00				
N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				.00			
2 SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					.00		
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00	
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00	
																								.00	
TOT	5.24	2.77	2.50	3.37	6.92	9.31	9.47	8.35	7.43	11.57	9.21	5.28	5.11	5.82	4.32	4.05	100.72	10.69	3.08	6.30	23.61	27.64	16.99	12.42	100.72

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
.91	.68	.09	.05	.00	.09	.32	1.09	.32	1.81	.82	.82	.50	1.68	1.04	.50	10.69	Extremely Unstable
.09	.05	.18	.00	.09	.00	.18	.41	.18	.50	.32	.27	.00	.36	.14	.32	3.08	Moderately Unstable
.18	.05	.05	.18	.09	.18	.45	.72	.50	1.45	.68	.54	.41	.23	.27	.32	6.30	Slightly Unstable
2.45	.63	.86	.63	.91	1.81	2.08	1.86	1.81	3.40	2.45	1.27	.77	1.04	.77	.86	23.61	Neutral
.86	.36	.45	.82	1.59	1.99	2.49	1.63	2.08	2.90	4.26	1.95	2.40	.82	1.54	1.50	27.64	Slightly Stable
.48	.53	.44	.76	1.68	2.37	2.46	1.86	1.86	1.03	.62	.21	.76	1.17	.39	.39	16.99	Moderately Stable
.28	.47	.43	.93	2.56	2.87	1.49	.78	.68	.48	.07	.23	.28	.53	.17	.18	12.42	Extremely Stable

Wind Direction by Wind Speed

[illegible]

July-September 1995
296-33 ft. DIFFERENTIAL TEMPERATURE

SPEED CLASS	WIND DIRECTION CLASSES																STABILITY CLASSES								
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						
C SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					
A N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				
L SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				
M MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00				
1 SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				
- N	.05	.05	.00	.05	.05	.05	.00	.00	.14	.14	.14	.18	.14	.14	.00	.00	1.09				1.09				
3 SS	.00	.05	.00	.05	.14	.00	.00	.00	.05	.09	.14	.05	.09	.00	.05	.09	.77					.77			
MS	.00	.00	.00	.14	.00	.05	.00	.00	.09	.00	.00	.05	.05	.00	.05	.41						.41			
ES	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.05	.00	.00	.05	.14							.14		2.45
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.05	.05							
MU	.18	.05	.09	.00	.00	.00	.00	.14	.23	.05	.00	.05	.14	.23	.14	1.27		1.27							
4 SU	.23	.05	.05	.00	.00	.05	.27	.32	.09	.45	.18	.18	.00	.18	.09	.23	2.36			2.36					
- N	.18	.18	.05	.14	.50	.72	.63	.36	.59	1.36	.82	.59	.41	.32	.50	.36	7.70				7.70				
7 SS	.14	.09	.18	.18	.18	.18	.18	.14	.32	.45	.72	.32	.32	.41	.09	.18	4.08					4.08			
MS	.18	.14	.23	.14	.18	.14	.14	.27	.32	.27	.45	.14	.18	.00	.14	.23	3.13						3.13		
ES	.00	.14	.05	.14	.00	.14	.05	.05	.23	.05	.14	.18	.09	.00	.00	.00	1.22							1.22	19.80
EU	.14	.32	.09	.00	.00	.00	.09	.05	.09	.18	.00	.05	.14	.05	.41	.05	1.63	1.63							
MU	.18	.32	.09	.09	.14	.00	.23	.50	.27	.59	.36	.23	.14	.45	.09	.23									

CECO QUAD CITIES STATION
296 ft. WIND SPEED and WIND DIRECTION

July-September 1995
296-33 ft. DIFFERENTIAL TEMPERATURE

SPEED CLASS	WIND DIRECTION CLASSES																STABILITY CLASSES								
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.00	.00	.00	.09	.00	.00	.00	.00	.09	.00	.00	.18	.18								
1 MU	.00	.00	.00	.00	.00	.00	.00	.05	.00	.05	.00	.00	.09	.00	.00	.18		.18							
9 SU	.00	.00	.00	.00	.00	.00	.00	.05	.05	.00	.00	.05	.09	.00	.00	.23			.23						
N	.05	.00	.41	.00	.00	.05	.05	.27	.23	.32	.00	.18	.05	.05	.00	.05	1.68				1.68				
2 SS	.05	.00	.00	.00	.00	.00	.14	.23	.54	.45	.32	.09	.09	.18	.00	.00	2.08					2.08			
4 MS	.00	.00	.00	.00	.00	.09	.09	.14	.00	.05	.09	.00	.00	.00	.05	.05	.54						.54		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.05							.05		4.94
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
6 MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
7 SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.14	.00	.00	.00	.14			.14					
N	.00	.00	.09	.00	.05	.00	.00	.00	.27	.00	.00	.00	.14	.00	.00	.00	.54					.54			
2 SS	.00	.00	.00	.00	.00	.00	.09	.09	.14	.09	.00	.00	.00	.00	.00	.00	.41						.41		
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00	1.09
TOT	5.62	3.22	2.90	1.90	2.45	6.07	7.43	9.56	10.29	14.77	11.10	6.21	4.89	6.12	3.35	4.12	100.00	3.35	7.29	7.79	29.50	27.78	17.85	6.43	100.00

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	STABILITY CLASSES
.27	.32	.09	.00	.00	.00	.09	.23	.14	.50	.05	.09	.23	.68	.50	.18	3.35	Extremely Unstable
.45	.45	.23	.09	.14	.05	.32	.77	.54	1.22	.41	.41	.32	.91	.63	.36	7.29	Moderately Unstable
.27	.09	.14	.14	.05	.09	.91	1.00	.45	1.81	.50	.82	.32	.50	.27	.45	7.79	Slightly Unstable
2.49	1.13	1.04	.41	1.09	1.68	2.17	2.08	2.45	4.35	3.17	2.04	1.31	1.81	.86	1.40	29.50	Neutral
1.27	.41	.50	.41	.68	1.86	2.13	2.31	3.04	3.53	4.35	1.90	1.95	1.63	.77	1.04	27.78	Slightly Stable
.59	.54	.63	.63	.32	1.81	1.22	2.17	2.76	2.72	2.22	.59	.50	.36	.32	.45	17.85	Moderately Stable
.27	.27	.27	.23	.18	.59	.59	1.00	.91	.63	.41	.36	.27	.23	.00	.23	6.43	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	WIND SPEED CLASSES
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	CALM
.05	.09	.00	.23	.18	.09	.05	.00	.27	.23	.27	.27	.32	.18	.05	.18	2.45	0.9 - 3.5 mph
.91	.63	.63	.59	.86	1.22	1.27	1.13	1.68	2.81	2.40	1.40	1.04	1.04	1.04	1.13	19.80	3.6 - 7.5 mph
2.08	1.36	1.31	.91	1.04	2.72	3.49	4.30	3.85	6.07	4.35	2.58	1.81	1.86	1.22	1.68	40.64	7.6 - 12.5 mph
2.49	1.13	.45	.18	.32	1.90	2.27	3.22	3.26	4.71	3.67	1.63	1.22	2.58	1.00	1.04	31.08	12.6 - 18.5 mph
.09	.00	.41	.00	.00	.14	.27	.82	.82	.86	.41	.32	.23	.45	.05	.09	4.94	18.6 - 24.5 mph
.00	.00	.09	.00	.05	.00	.09	.09	.41	.09	.00	.00	.27	.00	.00	.00	1.09	> 24.5 mph

October-December 1995
196-33 ft. DIFFERENTIAL TEMPERATURE

SPEED		WIND DIRECTION CLASSES														STABILITY CLASSES											
CLASS		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL	
	EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00								
	MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00							
C	SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			.00						
A	N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				.00					
L	SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					.00				
M	MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00			
E	S	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							.00		
																										.00	
																											.00
	EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00								
	MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00							
1	SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.05			.05						
-	N	.14	.14	.23	.42	.28	.05	.46	.14	.14	.18	.46	.18	.09	.37	.51	.37	4.16				4.16					
3	SS	.07	.40	.26	.21	.58	.35	.58	.44	.40	.30	.40	.63	.44	.63	.44	.30	6.42					6.42				
	MS	.17	.12	.26	.07	.36	.55	.69	.55	.40	.50	.40	.36	.36	1.12	.21	.12	6.24						6.24			
	ES	.02	.02	.13	.13	.86	1.12	.70	.60	.28	.23	.34	.08	.18	.39	.02	.02	5.13							5.13		
																											22.00
	EU	.00	.00	.00	.00	.00	.05	.00	.00	.18	.60	.14	.05	.37	.32	.14	.18	2.03	2.03								
	MU	.05	.00	.00	.00	.05	.00	.00	.23	.09	.18	.00	.05	.14	.18	.05	.00	1.02		1.02							
4	SU	.23	.00	.00	.14	.00	.42	.00	.18	.14	.18	.14	.14	.09	.42	.32	.18	2.59			2.59						
-	N	.55	.60	.55	1.39	.65	.46	.65	.97	.51	.74	.37	1.06	1.85	3.19	2.36	.88	16.77				16.77					
7	SS	.51	.1																								

October-December 1995
196-33 ft. DIFFERENTIAL TEMPERATURE

TOT 2.52 2.39 3.74 5.44 4.34 7.10 5.72 5.79 4.46 5.38 4.51 5.64 13.69 17.99 9.09 3.31 101.11 4.99 1.80 4.25 46.86 27.73 9.33 6.15 101.11

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
.00	.00	.00	.00	.00	.14	.09	.09	.37	.92	.42	.14	.65	1.02	.83	.32	4.99	Extremely Unstable
.14	.00	.00	.00	.09	.05	.00	.32	.18	.23	.00	.09	.28	.32	.09	.00	1.80	Moderately Unstable
.32	.00	.00	.14	.00	.46	.00	.28	.14	.18	.23	.23	.65	.92	.51	.18	4.25	Slightly Unstable
1.25	1.62	2.73	3.74	1.57	1.34	1.71	1.76	.92	1.39	1.29	2.68	7.21	10.77	4.94	1.94	46.86	Neutral
.58	.63	.63	.99	1.09	2.24	1.92	1.97	1.87	1.74	1.74	1.92	4.14	3.17	2.43	.67	27.73	Slightly Stable
.17	.12	.26	.44	.68	1.10	1.25	.78	.68	.69	.45	.50	.59	1.26	.21	.16	9.33	Moderately Stable
.07	.02	.13	.13	.91	1.77	.75	.60	.28	.23	.38	.08	.18	.53	.07	.02	6.15	Extremely Stable

Wind Direction by Wind Speed

[illegible]

October-December 1995
296-33 ft. DIFFERENTIAL TEMPERATURE

SPEED CLASS	WIND DIRECTION CLASSES																TOTAL	STABILITY CLASSES								TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		EU	MU	SU	N	SS	MS	ES		
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00									
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00								
1 SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
2 N	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						
3 SS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00					
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00				
5 ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00			
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00									
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00								
1 SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
2 N	.09	.05	.05	.09	.00	.09	.09	.05	.05	.14	.14	.09	.05	.05	.05	.05	1.11			1.11						
3 SS	.00	.00	.00	.00	.00	.00	.05	.05	.05	.05	.09	.05	.00	.00	.00	.09	.42			.42						
4 MS	.05	.09	.09	.00	.00	.00	.05	.05	.05	.05	.00	.00	.00	.05	.00	.00	.46			.46						
5 ES	.00	.00	.09	.00	.05	.14	.00	.09	.00	.00	.05	.00	.00	.00	.00	.05	.46						2.45			
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00									
MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00								
1 SU	.00	.00	.00	.00	.00	.09	.00	.00	.05	.09	.05	.00	.05	.00	.05	.00	.37			.37						
2 N	.51	.18	.28	.28	.42	.14	.09	.37	.09	.37	.37	.18	.23	.65	.69	.74	5.59			5.59						
7 SS	.05	.09	.51	.14	.32	.14	.09	.32	.09	.14	.00	.00	.32	.18	.00	.14	2.54			2.54						
MS	.09	.37	.23	.05	.05	.09	.00	.09	.09	.00	.00	.09	.23	.09	.05	.09	1.62				1.62					
ES	.00	.05	.05	.00	.00	.14	.05	.05	.00	.09	.09	.05	.05	.00	.00	.00	.60					.60	10.71			
EU	.00	.00	.00	.00	.00	.00	.00	.00	.09	.00	.00	.00	.09	.00	.00	.00	.18									
MU	.00	.00	.00	.00	.05	.18	.00	.05	.09	.09	.00	.00	.28	.14	.00	.23	1.11									
8 SU	.05	.05	.00	.09	.05	.09	.00	.09	.05	.28	.00	.00	.09	.28	.18	.18	1.48			1.48						
2																										

CECo QUAD CITIES STATION
296 ft. WIND SPEED and WIND DIRECTION

October-December 1995
296-33 ft. DIFFERENTIAL TEMPERATURE

SPEED CLASS	WIND DIRECTION CLASSES																STABILITY CLASSES								
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	EU	MU	SU	N	SS	MS	ES	TOTAL
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
1 MU	.00	.00	.00	.00	.00	.00	.00	.00	.05	.14	.09	.05	.05	.00	.05	.00	.42		.42						
9 SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.05	.28	.23	.14	.00	.78			.78					
- N	.09	.32	.51	.88	.23	.37	.23	.51	.65	.46	.18	.69	2.17	2.68	1.06	.32	11.36				11.36				
2 SS	.00	.00	.00	.14	.05	.18	.28	.55	.69	.92	.00	.05	.42	.18	.18	.00	3.65					3.65			
4 MS	.00	.00	.00	.00	.00	.05	.09	.09	.18	.00	.00	.00	.00	.00	.00	.00	.42						.42		
ES	.00	.00	.00	.00	.00	.05	.05	.00	.05	.00	.05	.00	.00	.00	.00	.00	.18						.18		
																									16.81
EU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00							
6 MU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00		.00						
T SU	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.05			.05					
- N	.14	.14	.60	.05	.00	.00	.00	.42	.05	.09	.28	.23	1.15	2.03	.46	.28	5.91				5.91				
2 SS	.00	.00	.00	.00	.00	.00	.00	.18	.05	.28	.05	.00	.00	.00	.00	.00	.55					.55			
4 MS	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
ES	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00						.00		
																								.00	6.51
TOT	3.42	2.59	4.16	4.89	3.42	4.34	4.25	6.97	5.17	8.49	3.46	4.66	12.60	15.84	11.08	4.66	100.00	.51	2.17	3.83	53.92	25.67	9.74	4.16	100.00

Wind Direction by Stability

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-STABILITY CLASSES-
.00	.00	.00	.00	.00	.00	.00	.00	.09	.28	.00	.00	.00	.14	.00	.00	.51	Extremely Unstable
.00	.00	.00	.00	.05	.18	.00	.14	.18	.32	.09	.05	.32	.37	.23	.23	2.17	Moderately Unstable
.05	.05	.00	.09	.05	.18	.09	.18	.18	.60	.14	.05	.51	.88	.60	.18	3.83	Slightly Unstable
1.89	1.43	2.86	3.74	2.12	1.34	1.25	2.72	1.85	1.89	1.52	2.77	7.76	11.36	7.02	2.40	53.92	Neutral
.74	.42	.83	.74	.92	1.48	1.80	2.54	2.03	3.09	.74	.92	3.00	2.82	2.54	1.06	25.67	Slightly Stable
.55	.65	.32	.32	.23	.74	.92	.78	.60	1.43	.42	.69	.78	.23	.60	.46	9.74	Moderately Stable
.18	.05	.14	.00	.05	.42	.18	.60	.23	.88	.55	.18	.23	.05	.09	.32	4.16	Extremely Stable

Wind Direction by Wind Speed

N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	-WIND SPEED CLASSES-
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	CALM
.14	.14	.23	.09	.05	.23	.18	.23	.14	.23	.28	.14	.05	.09	.05	.18	2.45	0.9 - 3.5 mph
.65	.69	1.06	.46	.78	.60	.23	.83	.32	.69	.51	.32	.88	.92	.78	.97	10.71	3.6 - 7.5 mph
1.66	.78	1.06	1.25	.83	1.52	.88	1.75	1.06	2.35	1.11	1.15	1.75	2.45	3.09	1.99	24.70	7.6 - 12.5 mph
.74	.51	.69	2.03	1.48	1.34	2.31	2.40	1.94	3.28	.83	1.99	5.86	7.25	5.26	.92	38.83	12.6 - 18.5 mph
.09	.32	.51	1.02	.28	.65	.65	1.15	1.62	1.52	.42	.83	2.91	3.09	1.43	.32	16.81	18.6 - 24.5 mph
.14	.14	.60	.05	.00	.00	.00	.60	.09	.42	.32	.23	1.15	2.03	.46	.28	6.51	> 24.5 mph

SOLID RADWASTE SEMI-ANNUAL REPORT

Shipping Date	Carrier	Site	Volume (m ³)	Millicuries
7/1/95	HITTMAN	SEG	29.90	1.51E+01
7/17/95	TSMT	BARNWELL	29.90	4.17E-02
7/21/95	HITTMAN	SEG	29.90	6.46E+00
8/8/95	KINDRICK	ALARON	73.06	4.11E+01
8/10/95	HITTMAN	SEG	36.24	2.91E+01
8/10/95	TSMT	BARNWELL	0.06	4.15E-01
8/11/95	KINDRICK	SEG	72.49	2.16E+01
8/22/95	HITTMAN	ALARON	73.06	7.56E+00
8/30/95	HITTMAN	ALARON	73.06	7.56E+00
8/31/95	TSMT	BARNWELL	3.41	2.08E+05
9/13/95	TSMT	BARNWELL	5.83	2.69E+03
9/20/95	HITTMANN	ALARON	73.06	9.45E-01
9/22/95	TSMT	BARNWELL	3.41	1.06E+05
9/26/95	TSMT	BARNWELL	2.97	4.11E+02
9/26/95	TSMT	BARNWELL	3.41	2.67E+05
9/28/95	HITTMAN	ALARON	73.06	9.81E-01
10/4/95	TSMT	BARNWELL	3.41	2.14E+05
10/6/95	TSMT	BARNWELL	2.97	5.60E+01
10/9/95	TSMT	BARNWELL	3.41	2.85E+05
10/10/95	HITTMAN	ALARON	73.06	1.45E+00
10/13/95	TSMT	AERC	18.89	7.52E+03
10/13/95	KINDRICK	AERC	36.24	7.52E+03
10/13/95	TSMT	BARNWELL	3.41	2.80E+05
10/15/95	TSMT	BARNWELL	5.83	4.70E+01
10/18/95	TSMT	BARNWELL	3.41	2.91E+05
10/19/95	TSMT	BARNWELL	5.83	4.29E+04
10/20/95	TSMT	BARNWELL	5.83	3.29E+04
10/23/95	KINDRICK	AERC	16.14	1.25E+03
10/24/95	KINDRICK	AERC	36.24	1.11E+03
10/24/95	TSMT	BARNWELL	4.81	3.09E+04
10/25/95	HITTMAN	ALARON	73.06	1.07E+03
10/25/95	TSMT	BARNWELL	5.83	1.87E+04
10/25/95	TSMT	BARNWELL	3.41	2.52E+04
10/26/95	KINDRICK	AERC	16.14	6.74E+02
10/27/95	TSMT	BARNWELL	5.83	2.11E+04
10/30/95	KINDRICK	AERC	16.14	1.19E+03
11/1/95	HITTMAN	ALARON	73.06	5.95E+01
11/1/95	TSMT	BARNWELL	3.41	3.46E+05
11/1/95	TSMT	BARNWELL	5.83	5.82E+03
11/2/95	TSMT	BARNWELL	5.83	3.04E+04
11/3/95	TSMT	BARNWELL	5.83	2.69E+04
11/3/95	KINDRICK	AERC	16.14	8.62E+02
11/6/95	KINDRICK	AERC	16.14	1.15E+03
11/7/95	TSMT	BARNWELL	5.83	3.63E+04
11/8/95	TSMT	BARNWELL	5.83	3.33E+04
11/9/95	KINDRICK	AERC	16.14	3.63E+03
11/10/95	HITTMAN	SEG	36.24	2.01E+03
11/10/95	TSMT	BARNWELL	5.83	2.73E+04
11/13/95	TSMT	BARNWELL	3.41	3.90E+04
11/13/95	TSMT	BARNWELL	5.83	1.91E+04
11/14/95	KINDRICK	AERC	16.14	8.50E+02
11/14/95	KINDRICK	AERC	14.44	6.95E+02
11/15/95	TSMT	BARNWELL	5.83	2.38E+04
11/15/95	TSMT	BARNWELL	5.83	2.30E+03
11/16/95	HITTMAN	SEG	36.24	1.98E+03
11/17/95	TSMT	BARNWELL	5.83	2.77E+04
11/20/95	TSMT	BARNWELL	3.41	1.30E+05
11/20/95	TSMT	BARNWELL	5.83	2.31E+04
11/28/95	HITTMAN	ALARON	73.06	4.30E+02
11/28/95	TSMT	BARNWELL	5.83	5.04E+04
11/28/95	TSMT	BARNWELL	5.83	3.11E+04
11/29/95	TSMT	BARNWELL	3.41	1.87E+05
11/29/95	TSMT	BARNWELL	5.83	5.91E+04
11/30/95	TSMT	BARNWELL	3.41	1.10E+05
11/30/95	TSMT	BARNWELL	5.83	2.63E+03
12/4/95	TSMT	BARNWELL	3.41	2.07E+04
12/5/95	TSMT	BARNWELL	5.07	1.63E+04
12/5/95	TSMT	BARNWELL	5.07	1.82E+04
12/6/95	TSMT	BARNWELL	5.07	2.25E+04
12/6/95	TSMT	BARNWELL	3.41	1.32E+05
12/7/95	TSMT	BARNWELL	3.41	2.24E+03
12/8/95	TSMT	BARNWELL	5.83	1.77E+03
12/8/95	TSMT	BARNWELL	3.41	1.12E+05
12/11/95	TSMT	BARNWELL	3.41	5.03E+04
12/12/95	TSMT	BARNWELL	5.83	4.37E+04
12/13/95	HITTMAN	ALARON	73.06	1.91E+01
12/13/95	TSMT	BARNWELL	3.41	5.63E+04
12/15/95	TSMT	BARNWELL	5.83	4.03E+03
12/18/95	TSMT	BARNWELL	4.81	8.51E+02
12/18/95	TSMT	BARNWELL	5.83	2.88E+04
12/21/95	KINDRICK	AERC	36.24	8.38E+00

Number of
Shipments =
83

Total M³ =
1497.57

Total Millicuries =
3.55E+06