BRUNSWICK STEAM ELECTRIC PLANT

Semiannual Environmental and Effluent Release Report

January 1, 1980 to June 30, 1980

Attachments

1. Effluent, Waste Disposal
2. Meteorological Data
3. Technical Specification Changes
4. Ocean Outfall Thermal Monitoring
5. Maintenance Dredging in Intake Canal
6. Milk Usage Survey (Sample Station 35)

1980

Supplemental Information

Facility Brunswick Steam Electric Plant License Carolina Power & Light Co.

1. Regulatory Limits

   a. Fission & activation gases

      $\Sigma \bar{E} \beta [1.5 Q_s + 575 Q_v] \leq 1$ quarterly reporting average

      $\Sigma \bar{E} \gamma [45 Q_s + 400 Q_v] \leq 1$ quarterly reporting average

      $\Sigma \bar{E} \beta [2.8 Q_s + 1160 Q_v] \leq 1$ 12 consecutive month average

      $\Sigma \bar{E} \gamma [90 Q_s + 800 Q_v] \leq 1$ 12 consecutive month average

   b. I-131 and Particulates with half-lives >8 days

      $[3.26 \times 10^6] Q_s + [3.74 \times 10^7] Q_v \leq 1$ quarterly reporting average

      $[6.56 \times 10^6] Q_s + [7.46 \times 10^7] Q_v \leq 1$ 12 consecutive month average

   c. Liquid effluents

      20 Curies per calender quarter
      40 Curies per 12 consecutive months

2. Maximum Instantaneous Release Rates (10CFR20)

   a. Fission & activation Gases

      $\Sigma Q_s [4.0 \bar{E}\gamma + 0.23 \bar{E}\beta] + Q_v [35 \bar{E}\gamma + 92 \bar{E}\beta] \leq 1$

   b. I-131 and Particulates with half-lives greater than eight days.

      $[3.7 \times 10^4] Q_s + [5.8 \times 10^6] Q_v \leq 1$

   c. Liquid Effluents

      Values specified in 10CFR Part 20, Appendix B, Table II, Column 2 for unrestricted areas

3. Average Energy Stack

   $\bar{E}\gamma$ = 6.05E-1 MeV $\bar{E}\beta$ = 4.24E-1 MeV

   Average Energy Ground

   $\bar{E}\gamma$ = 1.73E-1 MeV; $\bar{E}\beta$ = 2.48E-1 MeV

4. Measurements and Approximations of Total Radioactivity

a. Fission and activation gases
Analysis for specific radionuclides in representative grab samples by gamma spectroscopy.

b. Iodines

Analysis for specific radionuclides collected on charcoal cartridges by gamma spectroscopy.

c. Particulates

Analysis for specific radionuclides collected on filter papers by gamma spectroscopy.

d. Liquid effluents

Analysis for specific radionuclides by individual releases by gamma spectroscopy.

Relative variance for each measurement used in calculating activity values were combined using the additive property of variance. The square root of the combined variance was extracted to obtain an estimate of the standard deviation of the multistep process. The standard deviation was used to evaluate the error in the calculated activities at the 95% confidence level.

5. Batch Releases

a. Liquid

1. Number of batch releases: 245

2. Total time period for batch releases: 3.60E+4 minutes

3. Maximum time period for a batch release: 2670 minutes

4. Average time period for batch release: 96 minutes

5. Minimum time period for a batch release: 5 minutes

6. Average stream flow during periods of release of effluent into a flowing stream: not applicable.

b. Gaseous

1. Number of batch releases: none

2. Total time period for a batch release: not applicable

3. Maximum time period for a batch release: not applicable

4. Average time period for a batch release: not applicable

5. Minimum time period for a batch release: not applicable

6. Abnormal Release

a. Liquid

1. Number of releases: None

2. Total activity released: None

b. Gaseous

1. Number of releases: 1

2. Total activity released: 81 mCi (estimated) of fission and activated corrosion products.

NOTE: This event resulted in a Technical Specification violation. A 30 day report was submitted to the U. S. Nuclear Regulatory Commission Region II office (Reference: CP&L letter to James P. O'Reilly, Director, Region II Office, Serial BSEP/80-691, dated April 22, 1980).

METEOROLOGICAL DATA DURING ABNORMAL RELEASE

DATE	TIME	WIND DIRECTION (DEG.)	WIND SPEED (MPH)	STABILITY CLASS
2/21/80	2000	234	9.83	D
2/21/80	2100	222	9.20	E
2/21/80	2200	234	10.25	D
2/21/80	2300	228	7.53	E
2/22/80	0001	218	5.40	F
2/22/80	0100	201	5.50	F
2/22/80	0200	192	7.38	F
2/22/80	0300	231	12.05	E
2/22/80	0400	208	9.08	E
2/22/80	0500	190	6.85	F
2/22/80	0600	216	8.63	E
2/22/80	0700	238	8.78	E
2/22/80	0800	234	7.23	E

ATTACHMENT 1

EFFLUENT, WASTE DISPOSAL, AND POTENTIAL DOSES SEMIANNUAL REPORT

January - June, 1980

Brunswick Steam Electric Plant

TABLE 1A

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT YEAR 1980

GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

	Unit I & II	Quarter I	Quarter II	Est. Total Error,
A. Fission & activation gases				
1. Total release	Ci	3.34E+4	8.86E+3	11.77
2. Average release rate for period	uCi/sec	4.22E+3	1.12E+3	
3. Percent of Technical Specification limit	%	1.77E+1	6.91E+0	
B. Iodines				
1. Total iodine-131	Ci	1.65E-1	1.86E-3	5.39
2. Average release rate for period	uCi/sec	2.09E-2	2.35E-4	
3. Percent of Technical Specification limit	%	2.18E+1	5.43E-1	
c. Particulates				
1. Particulates with half-lives of 8 days	Ci	2.30E-1	7.27E-2	7.49
2. Average release rate for period	uCi/sec	2.91E-2	9.20E-3	
3. Percent of Technical Specification limit	%	9.51E+1	3.01E+1	
4. Gross alpha radioactivity	Ci	5.64E-7	7.01E-8	
D. Tritium				
1. Total release	Ci	5.05E+0	2.19E+0	8.90
2. Average release rate for period	uCi/sec	6.39E-1	2.77E-1	
*3. Percent of Technical Specification limit	%	1.26E-1	5.48E-2	

* Based on 10 CFR 20 App. B limit of 4E-05uCi/ml for H_3 submersion in an unrestricted area.

TABLE 1B

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT YEAR 1980

GASEOUS EFFLUENTS-ELEVATED RELEASE

Continuous Mode .. Batch Mode

Nuclides Released	Unit	Quarter I	Quarter II	Quarter	Quarter
1. Fission gases					
krypton-85	Ci	<MDA	<MDA		
krypton-85m	Ci	2.24 E+3	1.21 E+2		
krypton-87	Ci	3.60 E+3	4.14 E+2		
krypton-88	Ci	3.34 E+3	2.11 E+2		
xenon-133	Ci	6.98 E+3	9.72 E+2		
xenon-135	Ci	9.33 E+3	3.49 E+2		
xenon-135m	Ci	1.69 E+3	5.05 E+2		
xenon-138	Ci	2.36 E+3	3.76 E+3		
argon-41	Ci	2.13 E+2	4.94 E+2		
xenon-133m	Ci	2.40 E+2	<MDA		
	Ci				
unidentified	Ci	8.26 E+2	4.49 E+2		
Total for Period	Ci	3.08 E+4	7.27 E+3		
2. Iodines					
iodine-131	Ci	1.30 E-1	8.15 E-4		
iodine-132	Ci	<MDA	<MDA		
iodine-133	Ci	9.35 E-2	2.45 E-3		
iodine-135	Ci	9.87 E-2	<MDA		
Total for Period	Ci	3.23 E-1	3.27 E-3		
3. Particulates					
strontium-89	Ci	2.57 E-3	1.40 E-4		
strontium-90	Ci	7.50 E-6	3.70 E-7		
cesium-134	Ci	9.35 E-4	7.23 E-5		
cesium-137	Ci	1.40 E-3	1.35 E-4		
barium-lanthanum-140	Ci	3.26 E-2	3.47 E-4		
cobalt-58	Ci	2.68 E-4	8.05 E-5		
cobalt-60	Ci	7.72 E-4	5.07 E-4		
chromium-51	Ci	6.24 E-4	3.75 E-4		
zirconium-niobium-95	Ci	<MDA	<MDA		
zinc-65	Ci	<MDA	2.75 E-5		
zinc-69m	Ci	<MDA	<MDA		
iron-59	Ci	5.78 E-5	1.91 E-5		
manganese-54	Ci	4.98 E-4	3.70 E-4		
iodine-131	Ci	1.62 E-3	<MDA		
cerium-139	Ci	7.94 E-3	1.22 E-5		
cerium-144	Ci	2.66 E-4	<MDA		
yttrium-88	Ci	<MDA	<MDA		
cadmium-109	Ci	<MDA	<MDA		
rhodium-109	Ci	1.47 E-3	<MDA		
silver-110m	Ci	2.55 E-4	<MDA		
unidentified	Ci	1.21 E-3	1.56 E-4		
Total for Period	Ci	5.24 E-2	2.24 E-3		

TABLE 1C

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT YEAR 1980

GASEOUS EFFLUENTS-GROUND LEVEL RELEASES

		Continuous Mode		Batch Mode	
Nuclides Released	Unit	Quarter I	Quarter II	Quarter	Quarter
1. Fission gases					
krypton-85	Ci	<MDA	<MDA		
krypton-85m	Ci	<MDA	<MDA		
krypton-87	Ci	<MDA	<MDA		
krypton-88	Ci	<MDA	<MDA		
xenon-133	Ci	1.34 E+3	5.70 E+2		
xenon-135	Ci	1.96 E+3	1.45 E+3		
xenon-135m	Ci	<MDA	<MDA		
xenon-138	Ci	<MDA	<MDA		
argon-41	Ci	<MDA	<MDA		
xenon-133m	Ci	6.74 E+1	2.46 E+1		
	Ci				
unidentified	Ci	1.24 E+3	2.91 E+2		
Total for Period	Ci	4.61 E+3	2.33 E+3		
2. Iodines					
iodine-131	Ci	3.46 E-2	1.05 E-3		
iodine-132	Ci	1.601 E-2	<MDA		
iodine-133	Ci	7.58 E-3	3.90 E-3		
iodine-135	Ci	3.20 E-2	<MDA		
Total for Period	Ci	8.28 E-2	4.95 E-3		
3. Particulates					
strontium-89	Ci	4.99 E-5	4.27 E-5		
strontium-90	Ci	2.13 E-6	1.99 E-6		
cesium-134	Ci	2.94 E-3	1.45 E-3		
cesium-137	Ci	3.59 E-3	2.59 E-3		
barium-lanthanum-140	Ci	1.99 E-3	<MDA		
cobalt-58	Ci	8.40 E-4	5.57 E-4		
cobalt-60	Ci	4.67 E-3	2.56 E-3		
chromium-51	Ci	4.25 E-2	1.48 E-2		
zirconium-niobium-95	Ci	<MDA	<MDA		
zinc-65	Ci	2.88 E-4	1.84 E-4		
iron-59	Ci	1.47 E-3	1.03 E-3		
manganese-54	Ci	5.66 E-3	3.32 E-3		
	Ci				
cerium-139	Ci	3.07 E-4	6.06 E-5		
cerium-144	Ci	<MDA	<MDA		
yttrium-88	Ci	<MDA	<MDA		
cesium-136	Ci	2.50 E-3	<MDA		
molybdenum-99	Ci	2.31 E+3	4.70 E-4		
technetium-99m	Ci	1.60 E-2	4.21 E-2		
	Ci				
tin-122	Ci	<MDA	2.46 E-5		
strontium-85	Ci	<MDA	<MDA		
tin-113	Ci	<MDA	<MDA		

TABLE 1C (Cont'd)

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT YEAR 1980

GASEOUS EFFLUENTS-GROUND LEVEL RELEASES

		Continuous Mode		Batch Mode	
Nuclides Released	Unit	Quarter I	Quarter II	Quarter	Quarter
3. Particulates					
tin-113m	Ci	<MDA	<MDA		
silver-110m	Ci	2.80 E-4	3.14 E-4		
ruthenium-103	Ci	9.40 E-5	<MDA		
unidentified		5.80 E-3	1.57 E-3		
Total for Period		1.85 E-1	7.22 E-2		

TABLE 2A

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT YEAR 1980

LIQUID EFFLUENTS–SUMMATION OF ALL RELEASES

	Unit 1 & II	Quarter I	Quarter II	Est. Total Error, %
A. Fission activation products				
*1. Total release (not including tritium, gases, alpha)	Ci	3.63 E-1	1.06 E-1	7.80
2. Average diluted concentration during period	uCi/ml	1.94 E-8	4.23 E-9	
3. Percent of applicable limit	%	1.45 E+1	4.24 E+0	
B. Tritium				
1. Total release	Ci	6.21	2.40	7.83
2. Average diluted concentration during period	uCi/ml	3.31 E-7	9.57 E-8	
3. Percent of applicable limit	%	1.10 E-2	3.19 E-3	
C. Dissolved and entrained gases				
1. Total release	Ci	2.16 E-2	2.78 E-3	13.51
2. Average diluted concentration during period	uCi/ml	1.15 E-9	1.11 E-10	
3. Percent of applicable limit	%	0.04	0.004	
D. Gross alpha radioactivity				
Total release	Ci	<MDA	<MDA	N/A
E. Volume of waste released (prior to dilution)	liters	3.68 E+6	7.20 E+6	5.66
F. Volume of dilution water used during period	liters	1.88 E+10	2.15 E+10	11.00

*Includes Estimated Total Error

TABLE 2B

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT YEAR 1980

LIQUID EFFLUENTS

		Batch Mode		Continuous Mode	
Nuclides Released	Unit	Quarter I	Quarter II	Quarter	Quarter
iodine-133	Ci	4.25 E-3	1.37 E-6		
iodine-132	Ci	3.47 E-4	<MDA		
antimony-122	Ci	3.67 E-3	1.96 E-3		
antimony-124	Ci	<MDA	<MDA		
cobalt-57	Ci	<MDA	<MDA		
cesium-136	Ci	6.93 E-5	<MDA		
cesium-138	Ci	<MDA	<MDA		
cerium-144	Ci	<MDA	<MDA		
yttrium-91m	Ci	<MDA	<MDA		
tellurium-129m	Ci	<MDA	<MDA		
strontium-85	Ci	<MDA	3.19 E-6		
niobium-97m	Ci	<MDA	<MDA		
zirconium-97	Ci	<MDA	<MDA		
tin-113	Ci	<MDA	<MDA		
tin-117m	Ci	<MDA	<MDA		
indium-113m	Ci	<MDA	<MDA		
barium-139	Ci	<MDA	<MDA		
cerium-139	Ci	<MDA	<MDA		
strontium-91	Ci	<MDA	<MDA		
technitium-101	Ci	<MDA	<MDA		
tellurium-132	Ci	9.89 E-4	<MDA		
tungsten-187	Ci	<MDA	<MDA		
continued on Table 2B-1					

Dissolved and Entrained Gases

xenon-133m	Ci	<MDA	<MDA		
xenon-135m	Ci	8.62 E-4	6.53 E-5		
krypton-85	Ci	<MDA	7.91 E-4		
krypton-85m	Ci	<MDA	<MDA		
argon-41	Ci	2.69 E-4	2.78 E-5		
xenon-131m	Ci	3.38 E-4	<MDA		
xenon-133	Ci	1.01 E-2	3.13 E-4		
xenon-135	Ci	1.01 E-2	1.59 E-3		
Total for Period	Ci	2.16 E-2	2.78 E-3		

TABLE 2B-1

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT YEAR 1980

LIQUID EFFLUENTS

		Batch Mode		Continuous Mode	
Nuclides Released	Unit	Quarter I	Quarter II	Quarter	Quarter
strontium-89	Ci	1.28 E-3	8.00 E-5		
strontium-90	Ci	3.61 E-5	2.07 E-5		
cesium-134	Ci	3.33 E-2	1.78 E-2		
cesium-137	Ci	4.57 E-2	2.44 E-2		
iodine-131	Ci	3.22 E-2	1.24 E-3		
cobalt-58	Ci	4.72 E-3	2.45 E-3		
cobalt-60	Ci	5.16 E-2	1.81 E-2		
iron-59	Ci	7.50 E-4	1.16 E-3		
zinc-65	Ci	5.18 E-4	1.96 E-4		
manganese-54	Ci	3.10 E-2	1.33 E-2		
chromium-51	Ci	2.97 E-2	1.18 E-2		
zirconium-niobium-95	Ci	2.50 E-6	1.03 E-5		
molybdenum-99	Ci	<MDA	<MDA		
technetium-99m	Ci	3.70 E-4	1.96 E-4		
barium-lanthanum-140	Ci	<MDA	<MDA		
cerium-141	Ci	<MDA	<MDA		
fluorine-18	Ci	3.03 E-2	2.94 E-3		
sodium-24	Ci	3.97 E-2	3.21 E-3		
manganese-56	Ci	<MDA	6.79 E-5		
copper-64	Ci	4.37 E-2	5.55 E-3		
arsenic-76	Ci	1.90 E-4	<MDA		
niobium-97	Ci	<MDA	2.42 E-4		
	Ci				
neptunium-239	Ci	8.61 E-3	<MDA		
strontium-92	Ci	<MDA	5.38 E-6		
silver-110m	Ci	<MDA	1.43 E-4		
nickel-65	Ci	<MDA	<MDA		
unidentified	Ci	7.95 E-3	4.80E-3		
Total for period (above)	Ci	3.71 E-1	1.11E-1		

MINIMUM DETECTABLE ACTIVITIES

(μCi/ml)

1. For Liquid Releases

Sb-124	1.82E-8	Sr-92	1.17E-8
As-76	3.41E-10	Tc-101	1.05E-8
Ba-139	4.04E-8	Te-129m	2.93E-7
Ba-140, La-140	5.75E-8	Te-132	1.27E-8
Ce-139	1.11E-8	Sn-113	9.36E-9
Ce-141	1.64E-8	Sn-117m	9.88E-9
Ce-144	7.17E-8	W-187	3.95E-8
Cs-136	1.34E-8	Xe-131m	4.86E-7
Cs-138	2.28E-8	Xe-133m	8.25E-8
Co-57	1.06E-8	Y-91m	2.23E-8
In-113m	1.44E-8	Zr-97	1.40E-8
I-132	1.57E-8		
Kr-85	2.55E-6		
Kr-85m	1.06E-8		
Mn-56	1.20E-8		
Mo-99	4.50E-8		
Np-239	8.24E-8		
Ni-65	5.45E-8		
Nb-97	9.82E-9		
Nb-97m	1.26E-8		
Ag-110m	8.40E-9		
Sr-85	1.03E-8		
Sr-91	1.74E-8		

MINIMUM DETECTABLE ACTIVITIES

(μCi/ml)
Continued

2. For Gaseous Releases

Ar-41	5.11E-8
Kr-85	3.91E-6
Kr-85m	1.33E-8
Kr-87	2.62E-8
Kr-88	3.62E-8
Xe-133m	5.86E-7
Xe-135m	5.94E-8
Xe-138	3.79E-8

3. For Iodines & Particulates

Sb-122	1.48E-14
Ba-140, La-140	3.95E-14
Cd-109	1.20E-13
Ce-144	5.64E-14
Cs-136	4.38E-15
I-132	1.16E-14
I-135	2.83E-14
Rh-106	1.05E-13
Ru-103	5.74E-15
Ag-110m	4.08E-15
Sr-85	6.38E-15
Sn-113	6.64E-15
Sn-113m	5.85E-14
Y-88	9.29E-15
Zn-65	2.78E-14
Zn-69m	6.32E-15
Zr-95, Nb-95	1.40E-14

TABLE 3

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (YEAR) 1980

SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

A. Solid Waste Shipped Offsite for Burial or Disposal (Not irradiated fuel)

1. Type of Waste	Unit	6-month period	Est. Total Error, %
a. Spent resins, filter sludges, evaporated bottoms, etc.	m^3	4.53 E02	
	Ci	3.83 E03	1.50E01
b. Dry compressible waste, contaminated equip., etc.	m^3	1.87 E03	
	Ci	8.93 E01	2.00E01
c. Irradiated components, control rods, etc.	m^3	0.00 E00	
	Ci	0.00 E00	0.00E00
d. Other (describe)	m^3	0.00 E00	
	Ci	0.00 E00	0.00E00

2. Estimate of major nuclide composition (by type of waste)

A + B	Cr-51	%	3.69 E01
	Mn-54	%	1.65 E01
	Fe-59	%	4.68 E00
	Co-58	%	4.25 E00
	Co-60	%	1.32 E01
	Zn-65	%	7.00 E-1
	I-131	%	6.95 E00
	Nb-95	%	8.00 E-2
	Sb-122	%	5.70 E-1
	Cs-134	%	7.64 E00
	Cs-136	%	8.00 E-4
	Cs-137	%	8.50 E00
		%	
C	None	%	
		%	
		%	
		%	
		%	
		%	
		%	
D	None		

3. Solid Waste Disposition

Number of Shipments	Mode of Transportation	Destination
170	Sole use Vehicle	Chem-Nuclear Systems, Inc. Barnwell, S. C.

B. Irradiated Fuel Shipments (Disposition)

Number of Shipments	Mode of Transportation	Destination
0	N/A	N/A

SHORELINE SEDIMENT DOSE AT CANAL, MREM/6 MOS.

	CHILD	TEEN	ADULT
WHOLE BODY	1.56E-06	7.48E-06	1.34E-06
SKIN	1.83E-06	8.77E-06	1.57E-06

LIQUID EFFLUENT DATA USED IN SHORELINE DOSE CALCULATIONS

DOSE DUE TO EATING FISH CAUGHT IN DISCHARGE CANAL, MREM/6 MOS

	CHILD	TEEN	ADULT
BONE	9.33E-05	7.65E-05	7.38E-05
LIVER	1.46E-04	1.72E-04	1.68E-04
WHOLE BODY	6.30E-05	6.79E-05	7.78E-05
THYROID	5.47E-05	5.30E-05	5.67E-05
KIDNEY	1.27E-05	1.53E-05	1.51E-05
LUNG	3.45E-05	4.46E-05	3.85E-05
GI-LLI	1.22E-04	3.30E-04	4.56E-04

LIQUID EFFLUENT DATA USED IN FISH DOSE CALULATIONS

DOSE DUE TO EATING GREEN LEAFY VEGS. FROM WORST GARDEN, MREM/6 MOS

	CHILD	TEEN	ADULT
BONE	1.86E-02	1.04E-02	1.15E-02
LIVER	2.11E-02	1.67E-02	1.89E-02
WHOLE BODY	4.14E-03	6.85E-03	1.37E-02
THYROID	2.07E-01	1.40E-01	1.74E-01
KIDNEY	7.60E-03	6.23E-03	7.06E-03
LUNG	2.38E-03	2.10E-03	2.07E-03
GI-LLI	8.03E-04	1.43E-03	2.22E-03

DOSES CALCULATED FROM GASEOUS EFFLUENT DATA

DOSE DUE TO EATING PRODUCE FROM WORST GARDEN, MREM/6 MOS

	CHILD	TEEN	ADULT
BONE	2.64E-01	1.11E-01	6.63E-02
LIVER	3.02E-01	1.80E-01	1.10E-01
WHOLE BODY	5.51E-02	7.26E-02	8.01E-02
THYROID	2.01E-02	1.03E-02	6.97E-03
KIDNEY	9.69E-02	5.97E-02	3.58E-02
LUNG	3.52E-02	2.32E-02	1.24E-02
GI-LLI	6.71E-03	9.23E-03	8.17E-03

DOSES CALCULATED FROM GASEOUS EFFLUENT DATA

DOSES CALCULATED FOR MAXIMUM EXPOSED INDIVIDUAL

I 31 DOSE DUE TO DRINKING MILK, MREM/6 MOS

	INFANT	CHILD	TEEN	ADULT
BONE	1.01E-02	4.85E-03	2.00E-03	1.10E-03
LIVER	1.19E-02	4.88E-03	2.80E-03	1.58E-03
WHOLE BODY	5.24E-03	2.77E-03	1.50E-03	9.03E-04
THYROID	3.92E+00	1.61E+00	8.17E-01	5.17E-01
KIDNEY	1.39E-02	8.01E-03	4.82E-03	2.70E-03
LUNG	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GI-LLI	4.26E-04	4.34E-04	5.54E-04	4.16E-04

TOTAL DOSE DUE TO DRINKING MILK, MREM/6 MOS

	INFANT	CHILD	TEEN	ADULT
BONE	5.15E-01	3.20E-01	1.35E-01	7.55E-02
LIVER	7.20E-01	3.78E-01	2.26E-01	1.30E-01
WHOLE BODY	6.67E-02	6.99E-02	9.18E-02	9.48E-02
THYROID	3.94E+00	1.62E+00	8.20E-01	5.18E-01
KIDNEY	2.02E-01	1.28E-01	7.88E-02	4.56E-02
LUNG	7.49E-02	4.29E-02	2.84E-02	1.42E-02
GI-LLI	6.07E-03	5.18E-03	7.11E-03	5.82E-03

DOSES EVALUATED FOR STEVENS' FARM (MK-35)

I-131 INHALATION DOSE AT WORST POINT ON SITE BOUNDARY, MREM/6 MOS

	INFANT	CHILD	TEEN	ADULT
BONE	1.24E-04	1.57E-04	1.15E-04	8.20E-05
LIVER	1.44E-04	1.57E-04	1.60E-04	1.16E-04
WHOLE BODY	6.38E-05	8.88E-05	8.60E-05	6.67E-05
THYROID	4.83E-02	5.29E-02	4.77E-02	3.88E-02
KIDNEY	1.69E-04	2.57E-04	2.73E-04	2.00E-04
LUNG	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GI-LLI	3.45E-06	9.25E-06	2.11E-05	2.04E-05

TOTAL INHALATION DOSE AT WORST POINT ON SITE BOUNDARY, MREM/6 MOS

	INFANT	CHILD	TEEN	ADULT
BONE	3.15E-03	5.14E-03	3.87E-03	2.81E-03
LIVER	4.61E-03	6.49E-03	6.98E-03	5.35E-03
WHOLE BODY	8.09E-04	1.82E-03	3.40E-03	4.25E-03
THYROID	5.48E-02	6.02E-02	5.35E-02	4.33E-02
KIDNEY	1.69E-03	2.84E-03	3.14E-03	2.51E-03
LUNG	5.21E-03	7.89E-03	9.82E-03	6.92E-03
GI-LLI	4.43E-04	8.65E-04	1.29E-03	1.29E-03

GASEOUS EFFLUENT DATA USED IN INHALATION DOSE CALCULATIONS

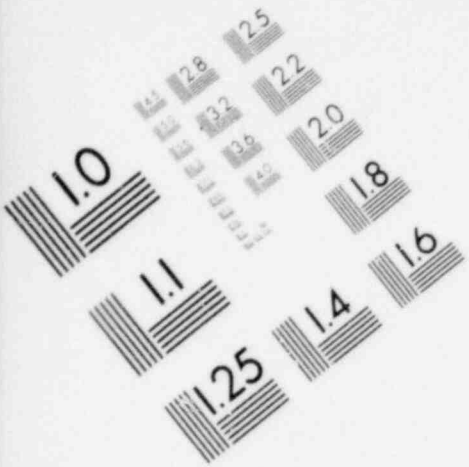
DOSE FROM NOBLE GAS RELEASES-SKIN
MREM/6 MOS

RADIAL DISTANCE, MILES

	0.5	1.5	2.5	3.5	4.5
S	8.21E-01	3.72E-01	2.31E-01	1.64E-01	1.23E-01
SSW	7.54E-01	3.60E-01	2.30E-01	1.66E-01	1.27E-01
SW	6.13E-01	3.23E-01	2.17E-01	1.62E-01	1.26E-01
WSW	4.54E-01	2.55E-01	1.75E-01	1.29E-01	9.99E-02
W	3.05E-01	1.68E-01	1.30E-01	9.38E-02	7.47E-02
WNW	3.25E-01	1.59E-01	1.05E-01	7.60E-02	5.76E-02
NW	2.88E-01	1.44E-01	9.34E-02	6.89E-02	5.33E-02
NNW	1.37E-01	8.03E-02	6.30E-02	5.22E-02	4.38E-02
N	3.02E-01	2.18E-01	1.14E-01	9.43E-02	7.48E-02
NNE	5.81E-01	3.24E-01	2.23E-01	1.66E-01	1.28E-01
NE	1.20E+00	6.09E-01	4.01E-01	3.01E-01	2.34E-01
ENE	1.20E+00	6.09E-01	4.05E-01	3.05E-01	2.38E-01
E	6.79E-01	3.10E-01	2.01E-01	1.50E-01	1.17E-01
ESE	7.60E-01	3.28E-01	1.95E-01	1.36E-01	1.38E-01
SE	1.15E+00	4.70E-01	2.69E-01	1.85E-01	1.38E-01
SSE	1.05E+00	4.54E-01	2.71E-01	1.90E-01	1.72E-01

RADIAL DISTANCE, MILES

	7.5	15.0	25.0	35.0	45.0
S	6.71E-02	2.79E-02	1.42E-02	9.06E-03	6.49E-03
SSW	7.08E-02	3.04E-02	1.59E-02	1.03E-02	7.41E-03
SW	7.19E-02	3.18E-02	1.69E-02	1.11E-02	8.11E-03
WSW	5.65E-02	2.47E-02	1.30E-02	8.50E-03	6.17E-03
W	4.50E-02	2.15E-02	1.20E-02	8.10E-03	6.10E-03
WNW	3.19E-02	1.37E-02	7.21E-03	4.72E-03	3.44E-03
NW	3.08E-02	1.40E-02	7.62E-03	5.08E-03	3.74E-03
NNW	2.87E-02	1.51E-02	9.03E-03	6.32E-03	4.80E-03
N	4.39E-02	1.99E-02	1.06E-02	6.89E-03	4.98E-03
NNE	7.35E-02	6.65E-02	3.02E-02	1.64E-02	1.08E-02
NE	1.32E-01	5.74E-02	2.97E-02	1.91E-02	1.37E-02
ENE	1.34E-01	5.84E-02	3.02E-02	1.95E-02	1.39E-02
E	6.93E-02	3.23E-02	1.79E-02	1.20E-02	8.90E-03
ESE	5.62E-02	2.39E-02	1.24E-02	8.09E-03	7.55E-03
SE	7.52E-02	3.16E-02	1.63E-02	1.05E-02	7.55E-03
SSE	7.93E-02	3.35E-02	1.72E-02	1.11E-02	7.88E-03



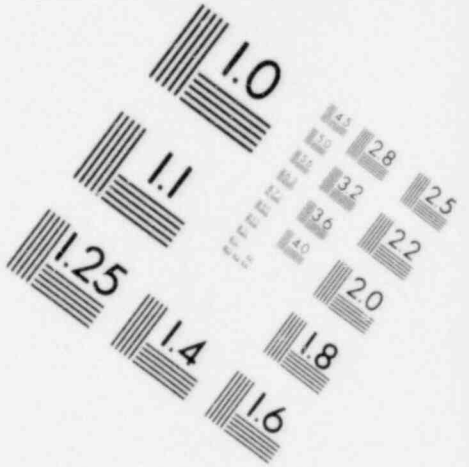
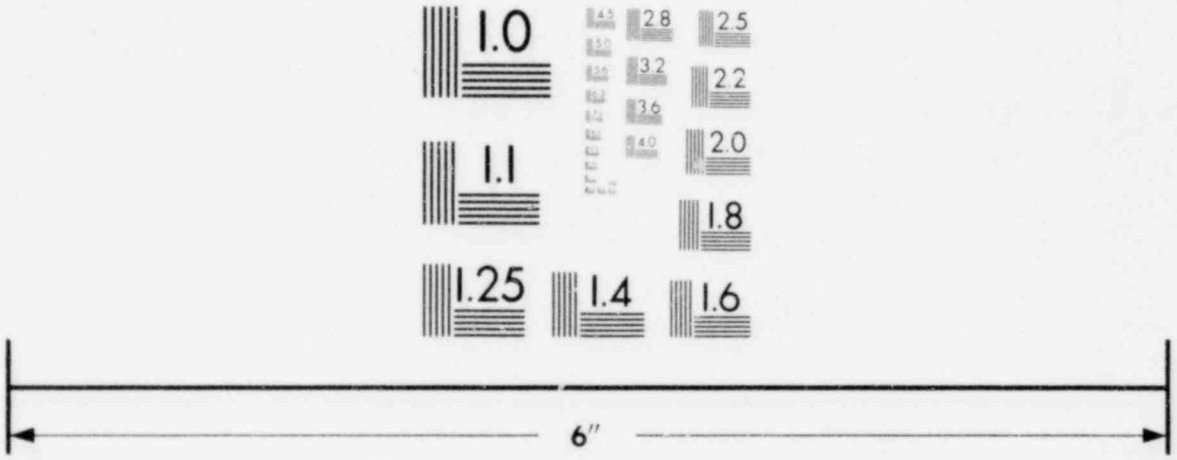
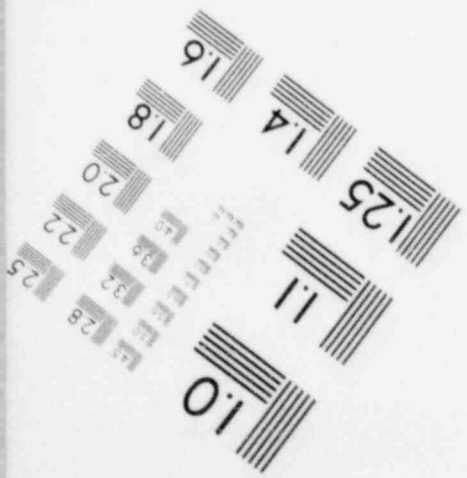
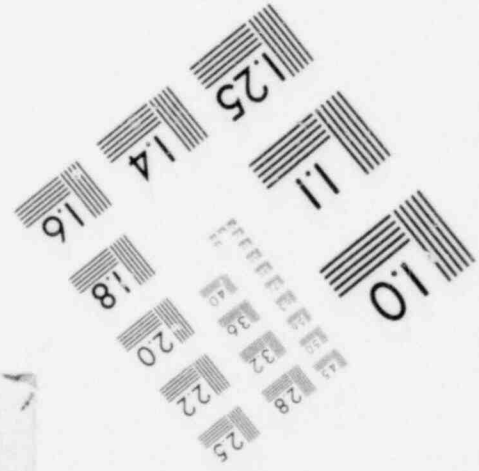
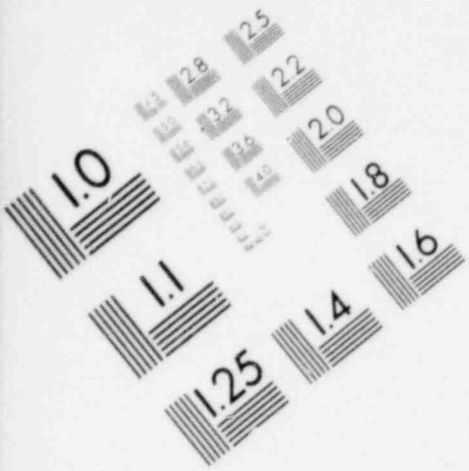


IMAGE EVALUATION TEST TARGET (MT-3)









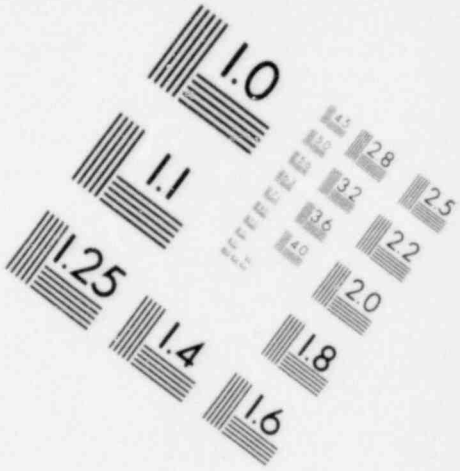
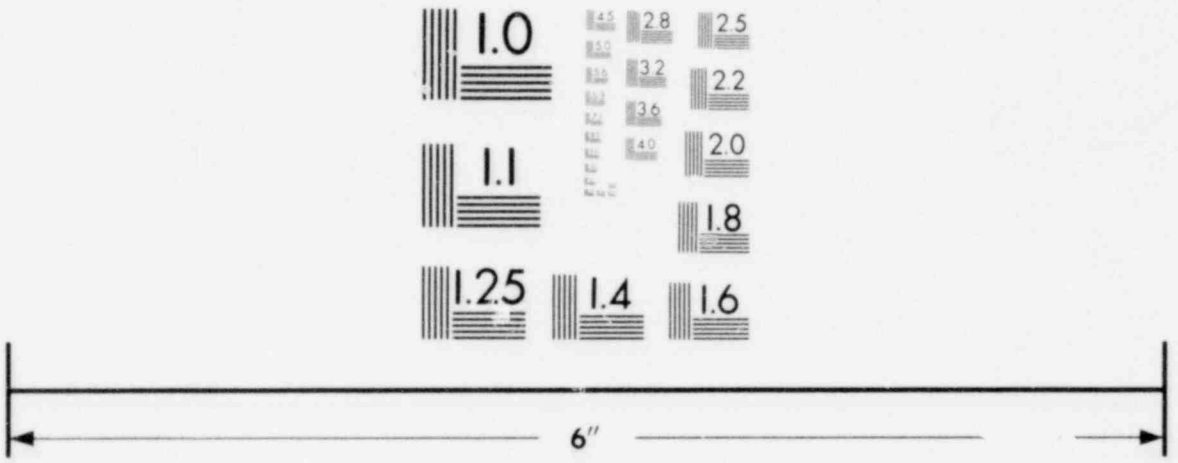
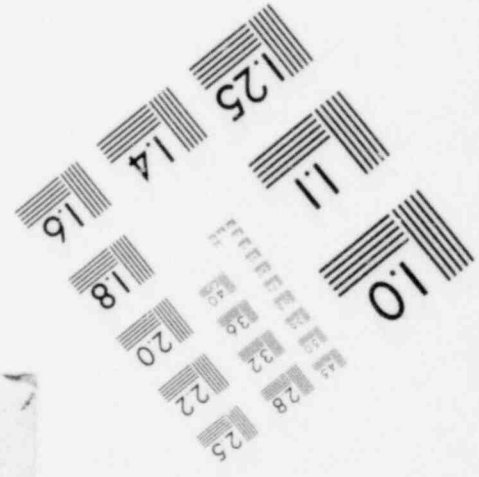


IMAGE EVALUATION TEST TARGET (MT-3)





DOSE FROM NOBLE GAS RELEASES-T. BODY
MREM/6 MOS

RADIAL DISTANCE, MILES

	0.5	1.5	2.5	3.5	4.5
S	3.18E-01	1.55E-01	1.00E-01	7.24E-02	5.49E-02
SSW	2.94E-01	1.51E-01	1.01E-01	7.43E-02	5.75E-02
SW	2.43E-01	1.39E-01	9.81E-02	7.43E-02	5.84E-02
WSW	1.86E-01	1.13E-01	8.04E-02	6.00E-02	4.69E-02
W	1.31E-01	7.62E-02	5.04E-02	4.45E-02	3.57E-02
WNW	1.36E-01	6.98E-02	4.78E-02	3.52E-02	2.68E-02
NW	1.19E-01	6.33E-02	4.26E-02	3.19E-02	2.49E-02
NNW	5.65E-02	3.58E-02	2.94E-02	2.48E-02	2.10E-02
N	1.23E-01	9.84E-02	5.60E-02	4.40E-02	3.52E-02
NNE	2.43E-01	1.45E-01	1.03E-01	7.79E-02	6.07E-02
NE	4.94E-01	2.66E-01	1.82E-01	1.39E-01	1.09E-01
ENE	4.94E-01	2.66E-01	1.84E-01	1.41E-01	1.11E-01
E	2.58E-01	1.27E-01	8.71E-02	6.64E-02	5.27E-02
ESE	2.95E-01	1.35E-01	8.38E-02	5.96E-02	6.02E-02
SE	4.48E-01	1.93E-01	1.14E-01	8.00E-02	6.02E-02
SSE	4.15E-01	1.90E-01	1.18E-01	8.40E-02	7.80E-02

RADIAL DISTANCE, MILES

	7.5	15.0	25.0	35.0	45.0
S	3.02E-02	1.27E-02	6.53E-03	4.20E-03	3.03E-03
SSW	3.24E-02	1.41E-02	7.43E-03	4.85E-03	3.51E-03
SW	3.38E-02	1.51E-02	8.08E-03	5.35E-03	3.91E-03
WSW	2.67E-02	1.18E-02	5.24E-03	4.10E-03	2.98E-03
W	2.16E-02	1.04E-02	5.83E-03	3.95E-03	2.97E-03
WNW	1.50E-02	6.50E-03	3.44E-03	2.26E-03	1.65E-03
NW	1.45E-02	6.67E-03	3.66E-03	2.45E-03	1.81E-03
NNW	1.38E-02	7.36E-03	4.41E-03	3.09E-03	2.35E-03
N	2.09E-02	9.52E-03	5.09E-03	3.33E-03	2.41E-03
NNE	3.50E-02	3.34E-02	1.47E-02	7.97E-03	5.27E-03
NE	6.23E-02	2.73E-02	1.42E-02	9.19E-03	6.60E-03
ENE	6.31E-02	2.77E-02	1.44E-02	9.31E-03	6.68E-03
E	3.17E-02	1.50E-02	8.44E-03	5.70E-03	4.24E-03
ESE	2.51E-02	1.09E-02	5.71E-03	3.75E-03	3.47E-03
SE	3.32E-02	1.42E-02	7.41E-03	4.80E-03	3.47E-03
SSE	3.57E-02	1.53E-02	7.92E-03	5.11E-03	3.66E-03

POPULATION INTEGRATED WHOLE BODY DOSE, MAN-REM/6 MOS

	RADIAL DISTANCE, MILES				
	0.5	1.5	2.5	3.5	4.5
S	1.59E-03	6.18E-03	6.99E-02	0.00E+00	0.00E+00
SSW	0.00E+00	2.43E-02	2.08E-01	0.00E+00	5.81E-03
SW	7.78E-03	8.88E-03	0.00E+00	5.94E-04	0.00E+00
WSW	0.00E+00	7.77E-03	6.43E-04	1.92E-03	2.35E-04
W	1.04E-03	2.52E-03	9.67E-04	0.00E+00	0.00E+00
WNW	2.17E-03	5.58E-04	0.00E+00	0.00E+00	0.00E+00
NW	9.55E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NNW	1.13E-03	1.43E-04	0.00E+00	0.00E+00	0.00E+00
N	2.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NNE	0.00E+00	2.32E-03	0.00E+00	0.00E+00	0.00E+00
NE	0.00E+00	5.32E-03	0.00E+00	0.00E+00	0.00E+00
ENE	0.00E+00	3.20E-03	0.00E+00	0.00E+00	0.00E+00
E	0.00E+00	2.02E-03	0.00E+00	0.00E+00	0.00E+00
ESE	0.00E+00	2.84E-03	0.00E+00	0.00E+00	0.00E+00
SE	1.61E-02	2.31E-03	0.00E+00	0.00E+00	0.00E+00
SSE	0.00E+00	7.61E-04	0.00E+00	0.00E+00	0.00E+00

	RADIAL DISTANCE, MILES				
	7.5	15.0	25.0	35.0	45.0
S	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SSW	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SW	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
WSW	4.63E-03	0.00E+00	0.00E+00	4.39E-03	6.78E-03
W	1.10E-03	1.31E-02	2.31E-02	1.97E-02	2.02E-02
WNW	1.86E-03	8.81E-03	6.04E-03	8.14E-03	2.33E-02
NW	2.22E-03	1.32E-02	8.82E-03	8.82E-03	1.02E-02
NNW	2.12E-03	8.63E-03	1.57E-02	8.20E-03	8.06E-03
N	1.90E-03	9.23E-02	5.19E-02	1.23E-02	1.58E-02
NNE	8.63E-02	1.68E+00	3.38E-01	2.31E-02	1.04E-02
NE	1.35E-01	0.00E+00	0.00E+00	1.12E-03	1.62E-02
ENE	4.96E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
E	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ESE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SSE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

TOTAL POPULATION INTEGRATED WHOLE BODY DOSE= 3.13E+00MAN-REM/6MOS

GASEOUS EFFLUENT DATA USED IN THESE DOSE CALCULATIONS
DOSES CALCULATED FOR MAXIMUM EXPOSED INDIVIDUALS

POPULATION INTEGRATED INHALATION DOSE
MAN-REM/6 MOS OR THYROID MAN-REM/6 MOS

	INFANT	CHILD	TEEN	ADULT
WHOLE BODY	1.21E-03	2.95E-02	3.67E-02	2.20E-01
THYROID	1.66E-01	2.06E+00	1.26E+00	4.97E+00

GASEOUS EFFLUENT DATA USED IN THESE DOSE CALCULATIONS
DOSES CALCULATED FOR MAXIMUM EXPOSED INDIVIDUALS

ATTACHMENT 2

METROLOGICAL DATA

Enclosure 1: Joint Frequency of Wind Direction and Speed, First Quarter

Enclosure 2: Joint Frequency of Wind Direction and Speed, Second Quarter

Enclosure 3: Diffusion Analysis, Ground Level Release

Enclosure 4: Diffusion Analysis, Elevated Release

Enclosure 5: Meteorological Data for Diffusion Analysis

January - June, 1980

Brunswick Steam Electric Plant

ENCLOSURE 1

JOINT FREQUENCY OF WIND DIRECTION AND SPEED
FIRST QUARTER 1980
BRUNSWICK STEAM ELECTRIC PLANT

The attached tables present the frequency of wind direction occurrences by wind speed class as recorded at the on-site meteorological system during the period January 1 through March 31, 1980.

The frequencies are presented as a percent of total occurrences for each stability class as well as a summary for all classes for each sensor elevation. The first eight tables are for the upper sensor elevation (100 meter); the last eight tables are for the lower (10 meter) sensor elevation.

Pertinent information available from the tables is as follows:

1. Stability

Percent occurrence Pasquill categories:

A	B	C	D	E	F	G
3.5	3.8	6.2	35.0	29.3	14.2	7.9

2. Wind Speed	10 Meter	100 Meter
Average Speed (mph)	8.5	16.6
Percent Calm	0.9	0.1
Percent Less than 3.5 mph	17.0	1.4

3. Wind Direction	10 Meter	100 Meter
Prevailing Direction	SW	NE
Percent Occurrence	11.5	10.3

4. Data Recovery	10 Meter	100 Meter
Percent Good Hours	97.9	92.7

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

STABILITY CLASS A
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.05	17.25
NNE	0.0	0.0	0.0	0.05	0.10	0.0	0.0	0.15	13.72
NE	0.0	0.0	0.0	0.10	0.10	0.05	0.0	0.25	13.82
ENE	0.0	0.0	0.0	0.05	0.35	0.20	0.0	0.60	17.27
E	0.0	0.0	0.0	0.10	0.45	0.0	0.0	0.55	14.85
ESE	0.0	0.0	0.05	0.35	0.10	0.0	0.0	0.50	10.17
SE	0.0	0.0	0.10	0.05	0.0	0.0	0.0	0.15	7.61
SSE	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.05	9.75
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.05	24.95
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.10	30.25
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.15	19.56
NW	0.0	0.0	0.0	0.0	0.15	0.15	0.15	0.45	21.56
NNW	0.0	0.0	0.0	0.0	0.0	0.05	0.05	0.10	24.29
TOTAL	0.0	0.0	0.15	0.75	1.30	0.65	0.30	3.15	17.31

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 21

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

STABILITY CLASS 8
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-#2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.05	0.05	0.10	0.0	0.0	0.20	12.24
NNE	0.0	0.0	0.0	0.10	0.10	0.0	0.0	0.20	12.80
NE	0.0	0.0	0.05	0.10	0.05	0.05	0.0	0.25	12.87
ENE	0.0	0.0	0.0	0.05	0.10	0.05	0.0	0.20	16.12
E	0.0	0.0	0.05	0.20	0.20	0.0	0.0	0.45	12.17
ESE	0.0	0.0	0.0	0.10	0.0	0.0	0.0	0.10	9.02
SE	0.0	0.0	0.0	0.05	0.05	0.0	0.0	0.10	10.47
SSE	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.05	7.95
S	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.05	9.95
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.15	0.30	0.45	27.05
WSW	0.0	0.0	0.0	0.10	0.05	0.05	0.05	0.25	18.17
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.05	0.15	0.05	0.25	21.74
NW	0.0	0.0	0.0	0.0	0.20	0.15	0.05	0.40	19.05
NNW	0.0	0.0	0.05	0.20	0.25	0.20	0.05	0.75	15.70
TOTAL	0.0	0.0	0.20	1.05	1.15	0.80	0.50	3.70	14.67

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 7

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

STABILITY CLASS C
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-#2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.05	0.20	0.10	0.10	0.0	0.45	13.45
NNE	0.0	0.0	0.0	0.25	0.35	0.0	0.0	0.60	14.09
NE	0.0	0.0	0.05	0.10	0.05	0.10	0.0	0.30	12.88
ENE	0.0	0.0	0.0	0.25	0.15	0.05	0.0	0.45	13.15
E	0.0	0.0	0.10	0.05	0.05	0.0	0.0	0.20	9.66
ESE	0.0	0.0	0.10	0.15	0.0	0.0	0.0	0.25	6.76
SE	0.0	0.0	0.10	0.05	0.0	0.0	0.0	0.15	7.00
SSE	0.0	0.0	0.10	0.0	0.0	0.0	0.0	0.10	4.97
S	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.05	6.83
SSW	0.0	0.0	0.0	0.20	0.0	0.0	0.0	0.20	11.14
SW	0.0	0.0	0.0	0.0	0.05	0.0	0.20	0.25	28.91
WSW	0.0	0.0	0.0	0.05	0.15	0.10	0.10	0.40	20.21
W	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.05	14.60
WNW	0.0	0.0	0.0	0.15	0.20	0.25	0.0	0.60	16.05
NW	0.0	0.0	0.05	0.25	0.20	0.30	0.15	0.95	18.55
NNW	0.0	0.0	0.25	0.50	0.40	0.0	0.0	1.15	10.94
TOTAL	0.0	0.0	0.85	2.20	1.75	0.90	0.45	6.14	13.07

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 9

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

STABILITY CLASS D
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.10	1.05	1.10	1.35	0.05	3.65	15.86
NNE	0.0	0.0	0.20	1.20	2.15	0.50	0.0	4.05	14.30
NE	0.0	0.10	0.25	0.30	1.60	1.65	0.90	4.80	17.30
ENE	0.0	0.0	0.35	0.95	1.30	0.80	0.25	3.65	15.28
E	0.0	0.0	0.10	0.20	0.65	0.25	0.0	1.20	14.93
ESE	0.0	0.0	0.15	0.20	0.05	0.05	0.0	0.45	9.74
SE	0.0	0.0	0.15	0.10	0.10	0.0	0.0	0.35	9.73
SSE	0.0	0.0	0.05	0.20	0.10	0.0	0.15	0.50	15.87
S	0.0	0.05	0.15	0.20	0.05	0.05	0.35	0.85	17.69
SSW	0.0	0.0	0.10	0.55	0.10	0.10	0.0	0.85	11.71
SW	0.0	0.0	0.15	0.40	0.25	0.60	1.00	2.40	21.93
WSW	0.0	0.0	0.05	0.45	0.80	1.05	0.80	3.15	19.66
W	0.0	0.05	0.15	0.35	0.20	0.0	0.15	0.90	12.92
WNW	0.0	0.0	0.15	0.30	0.60	0.45	0.55	2.05	19.68
NW	0.0	0.0	0.10	0.60	2.10	0.70	0.20	3.70	16.06
NNW	0.0	0.05	0.15	1.00	1.80	0.75	0.0	3.75	14.52
TOTAL	0.0	0.25	2.35	8.04	12.94	8.29	4.40	36.26	15.57

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 42

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

STABILITY CLASS E
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.05	0.0	0.30	0.75	0.45	0.0	1.55	16.08
NNE	0.0	0.0	0.05	0.15	1.20	0.75	0.0	2.15	17.12
NE	0.0	0.05	0.05	0.20	0.85	0.70	0.30	2.15	18.45
ENE	0.0	0.0	0.0	0.30	0.40	0.20	0.05	0.95	16.38
E	0.0	0.05	0.0	0.30	1.00	0.0	0.10	1.45	15.27
ESE	0.0	0.0	0.0	0.15	0.20	0.0	0.05	0.40	13.91
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.30	0.30	27.95
SSE	0.0	0.05	0.05	0.15	0.35	0.55	0.65	1.80	21.33
S	0.0	0.10	0.10	0.20	0.10	0.10	1.05	1.65	24.96
SSW	0.0	0.0	0.20	0.20	0.25	0.20	0.80	1.65	22.57
SW	0.0	0.0	0.20	0.20	0.30	1.40	1.35	3.45	22.74
WSW	0.0	0.0	0.05	0.55	1.35	1.30	1.05	4.30	20.25
W	0.0	0.05	0.10	0.10	0.50	0.15	0.05	0.95	14.13
WNW	0.0	0.0	0.05	0.05	0.35	0.70	0.0	1.15	19.12
NW	0.0	0.0	0.0	0.15	1.15	0.70	0.0	2.00	16.99
NNW	0.0	0.0	0.0	0.45	0.80	1.05	0.0	2.30	17.09
TOTAL	0.0	0.35	0.85	3.45	9.54	8.24	5.74	28.17	19.02

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 62

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

STABILITY CLASS F
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.0	0.0	0.35	0.30	0.0	0.65	17.83
NNE	0.0	0.0	0.05	0.25	0.60	0.50	0.0	1.40	16.46
NE	0.0	0.0	0.05	0.05	1.25	0.45	0.0	1.80	16.51
ENE	0.0	0.0	0.0	0.50	0.40	0.0	0.0	0.90	11.61
E	0.0	0.0	0.15	0.30	0.70	0.0	0.0	1.15	12.78
ESE	0.0	0.0	0.05	0.05	0.05	0.0	0.0	0.15	10.85
SE	0.0	0.0	0.05	0.10	0.25	0.05	0.0	0.45	13.82
SSE	0.0	0.05	0.05	0.25	0.10	0.35	0.0	0.80	14.57
S	0.0	0.0	0.0	0.30	0.05	0.15	0.0	0.50	14.19
SSW	0.0	0.0	0.10	0.30	0.10	0.20	0.0	0.70	13.32
SW	0.0	0.0	0.0	0.10	0.35	0.40	0.10	0.95	18.85
WSW	0.0	0.0	0.05	0.30	0.45	0.25	0.05	1.10	15.62
W	0.0	0.0	0.15	0.45	0.35	0.05	0.0	1.00	12.00
WNW	0.0	0.0	0.05	0.20	0.30	0.20	0.0	0.75	15.34
NW	0.0	0.05	0.05	0.10	0.20	0.30	0.0	0.70	15.51
NNW	0.0	0.0	0.0	0.05	0.40	0.90	0.0	1.35	18.93
TOTAL	0.0	0.10	0.80	3.30	5.89	4.10	0.15	14.34	14.89

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 13

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

STABILITY CLASS G
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	CALM	SPEED CLASS(MPH) 0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.05	0.30	0.25	0.20	0.0	0.80	13.60
NNE	0.0	0.10	0.0	0.50	0.05	0.05	0.0	0.70	9.91
NE	0.0	0.05	0.0	0.55	0.10	0.05	0.0	0.75	10.10
ENE	0.0	0.05	0.05	0.30	0.15	0.0	0.0	0.55	10.52
E	0.0	0.05	0.05	0.45	0.15	0.0	0.0	0.70	10.59
ESE	0.0	0.0	0.05	0.0	0.10	0.0	0.0	0.15	11.89
SE	0.0	0.0	0.05	0.0	0.15	0.0	0.0	0.20	12.55
SSE	0.0	0.0	0.05	0.20	0.0	0.0	0.0	0.25	8.94
S	0.0	0.0	0.10	0.10	0.05	0.0	0.0	0.25	9.32
SSW	0.0	0.0	0.10	0.05	0.25	0.05	0.0	0.45	12.96
SW	0.0	0.05	0.15	0.10	0.15	0.15	0.0	0.60	12.46
WSW	0.0	0.0	0.0	0.40	0.10	0.0	0.0	0.50	11.28
W	0.0	0.10	0.10	0.20	0.05	0.0	0.05	0.50	9.88
WNW	0.0	0.10	0.10	0.10	0.35	0.05	0.05	0.75	13.35
NW	0.05	0.10	0.10	0.15	0.05	0.05	0.0	0.50	9.30
NNW	0.0	0.0	0.0	0.15	0.25	0.20	0.0	0.60	15.65
TOTAL	0.05	0.60	0.95	3.55	2.20	0.80	0.10	8.24	11.39

NUMBER OF CALMS - 1
NUMBER OF BAD HOURS - 4

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

SUMMARY
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.05	0.25	1.90	2.70	2.40	0.05	7.34	15.60
NNE	0.0	0.10	0.30	2.50	4.55	1.80	0.0	9.24	14.90
NE	0.0	0.20	0.35	1.40	4.00	3.05	1.20	10.29	17.49
ENE	0.0	0.05	0.40	2.40	2.85	1.30	0.30	7.29	14.67
E	0.0	0.10	0.45	1.60	3.20	0.25	0.10	5.69	13.64
ESE	0.0	0.0	0.40	1.00	0.50	0.05	0.05	2.00	10.52
SE	0.0	0.0	0.45	0.35	0.55	0.05	0.30	1.70	13.98
SSE	0.0	0.10	0.30	0.90	0.55	0.90	0.80	3.55	17.35
S	0.0	0.15	0.40	0.85	0.25	0.30	1.40	3.35	19.85
SSW	0.0	0.0	0.50	1.30	0.70	0.55	0.80	3.85	16.77
SW	0.0	0.05	0.50	0.80	1.10	2.75	2.95	8.14	21.73
WSW	0.0	0.0	0.15	1.85	2.90	2.75	2.15	9.79	19.13
W	0.0	0.20	0.50	1.10	1.15	0.20	0.25	3.40	12.57
WNW	0.0	0.10	0.35	0.80	1.85	1.95	0.65	5.69	17.87
NW	0.05	0.15	0.30	1.25	4.05	2.35	0.55	8.69	16.58
NNW	0.0	0.05	0.45	2.35	3.90	3.15	0.10	9.99	15.55
TOTAL	0.05	1.30	6.14	22.33	34.76	23.78	11.64	100.00	16.62

NUMBER OF CALMS - 1
NUMBER OF BAD HOURS - 158

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

STABILITY CLASS A
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.05	12.50
NNE	0.0	0.0	0.05	0.14	0.0	0.0	0.0	0.19	9.53
NE	0.0	0.0	0.0	0.09	0.38	0.0	0.0	0.47	13.02
ENE	0.0	0.0	0.0	0.09	0.33	0.0	0.0	0.43	13.52
E	0.0	0.0	0.0	0.28	0.14	0.0	0.0	0.43	11.45
ESE	0.0	0.0	0.09	0.33	0.0	0.0	0.0	0.43	8.22
SE	0.0	0.0	0.0	0.19	0.0	0.0	0.0	0.19	8.06
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.14	0.0	0.14	22.34
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.19	0.09	0.0	0.28	15.75
NW	0.0	0.0	0.0	0.19	0.38	0.0	0.0	0.57	13.12
NNW	0.0	0.0	0.0	0.09	0.24	0.0	0.0	0.33	13.54
TOTAL	0.0	0.0	0.14	1.42	1.70	0.24	0.0	3.50	12.80

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 10

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

STABILITY CLASS B
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.09	0.24	0.0	0.0	0.0	0.33	8.41
NNE	0.0	0.0	0.05	0.09	0.0	0.0	0.0	0.14	10.14
NE	0.0	0.0	0.09	0.05	0.09	0.0	0.0	0.24	10.30
ENE	0.0	0.0	0.0	0.0	0.24	0.0	0.0	0.24	13.54
E	0.0	0.0	0.14	0.24	0.05	0.0	0.0	0.43	8.77
ESE	0.0	0.0	0.05	0.09	0.0	0.0	0.0	0.14	7.93
SE	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.14	6.64
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.05	9.05
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.19	0.33	0.0	0.52	20.76
WSW	0.0	0.0	0.0	0.09	0.05	0.0	0.0	0.14	12.04
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.05	0.19	0.0	0.0	0.24	15.18
NW	0.0	0.0	0.05	0.24	0.28	0.0	0.0	0.57	12.73
NNW	0.0	0.0	0.09	0.43	0.09	0.05	0.0	0.66	11.10
TOTAL	0.0	0.0	0.71	1.55	1.18	0.38	0.0	3.83	11.27

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

STABILITY CLASS C
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.09	0.05	0.19	0.14	0.0	0.0	0.47	8.43
NNE	0.0	0.05	0.05	0.47	0.05	0.0	0.0	0.61	9.66
NE	0.0	0.0	0.09	0.09	0.19	0.0	0.0	0.38	10.81
ENE	0.0	0.0	0.14	0.19	0.05	0.0	0.0	0.38	8.84
E	0.0	0.0	0.09	0.05	0.0	0.0	0.0	0.14	7.82
ESE	0.0	0.0	0.19	0.0	0.0	0.0	0.0	0.19	5.67
SE	0.0	0.0	0.24	0.0	0.0	0.0	0.0	0.24	5.75
SSE	0.0	0.0	0.14	0.0	0.0	0.0	0.0	0.14	5.69
S	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.05	9.78
SSW	0.0	0.0	0.0	0.14	0.0	0.05	0.0	0.19	13.76
SW	0.0	0.0	0.0	0.0	0.24	0.24	0.0	0.47	19.01
WSW	0.0	0.0	0.0	0.09	0.14	0.0	0.0	0.24	13.19
W	0.0	0.0	0.05	0.05	0.0	0.0	0.0	0.09	9.25
WNW	0.0	0.0	0.09	0.14	0.33	0.0	0.0	0.57	11.73
NW	0.0	0.0	0.19	0.57	0.33	0.05	0.05	1.18	11.30
NNW	0.0	0.09	0.38	0.43	0.0	0.0	0.0	0.90	7.53
TOTAL	0.0	0.24	1.70	2.46	1.47	0.33	0.05	6.24	9.89

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

STABILITY CLASS D
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.09	1.04	2.41	0.47	0.0	0.0	4.02	9.20
NNE	0.0	0.24	0.61	2.46	0.57	0.0	0.0	3.88	9.46
NE	0.0	0.33	0.66	1.89	1.23	0.61	0.0	4.73	11.78
ENE	0.0	0.24	0.66	1.18	0.28	0.05	0.0	2.41	8.35
E	0.0	0.05	0.52	0.52	0.05	0.0	0.0	1.13	7.94
ESE	0.0	0.05	0.33	0.05	0.0	0.0	0.0	0.43	5.61
SE	0.0	0.0	0.33	0.0	0.0	0.0	0.0	0.33	6.29
SSE	0.0	0.0	0.28	0.05	0.28	0.0	0.0	0.61	10.36
S	0.0	0.0	0.33	0.28	0.14	0.09	0.0	0.85	10.20
SSW	0.0	0.09	0.24	0.52	0.09	0.05	0.05	1.04	10.17
SW	0.0	0.0	0.28	0.75	1.23	0.61	0.05	2.93	14.19
WSW	0.0	0.09	0.19	0.90	0.99	0.24	0.0	2.41	12.76
W	0.0	0.14	0.43	0.33	0.05	0.14	0.0	1.09	8.76
WNW	0.05	0.47	0.61	0.43	0.47	0.28	0.0	2.32	9.69
NW	0.0	0.24	0.71	2.46	0.38	0.0	0.0	3.78	9.15
NNW	0.0	0.09	0.90	1.65	0.43	0.0	0.0	3.07	9.19
TOTAL	0.05	2.13	8.13	15.89	6.67	2.08	0.09	35.04	9.57

NUMBER OF CALMS = 1
NUMBER OF BAD HOURS = 27

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

STABILITY CLASS E
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-#2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.24	0.99	0.14	0.0	0.0	0.0	1.37	5.30
NNE	0.0	0.24	0.80	0.61	0.14	0.0	0.0	1.80	7.15
NE	0.09	0.57	0.57	0.52	0.28	0.0	0.0	2.03	7.27
ENE	0.0	0.14	0.61	0.33	0.09	0.0	0.0	1.18	6.96
E	0.0	0.14	0.24	0.19	0.0	0.0	0.0	0.57	5.89
ESE	0.0	0.05	0.05	0.0	0.05	0.0	0.0	0.14	6.89
SE	0.0	0.24	0.33	0.66	0.05	0.0	0.0	1.28	7.23
SSE	0.0	0.05	0.38	0.33	0.52	0.0	0.0	1.28	10.25
S	0.0	0.05	0.14	0.0	0.33	0.47	0.0	0.99	16.24
SSW	0.0	0.24	0.19	0.38	0.52	0.28	0.09	1.70	12.91
SW	0.05	0.43	0.90	1.89	1.84	0.28	0.05	5.44	11.19
WSW	0.09	0.81	0.71	1.61	0.52	0.0	0.0	3.55	8.41
W	0.05	0.28	0.76	0.24	0.05	0.0	0.0	1.37	5.69
WNW	0.05	0.38	1.04	0.52	0.0	0.0	0.0	1.99	6.05
NW	0.05	0.47	1.28	0.71	0.0	0.0	0.0	2.51	5.93
NNW	0.0	0.19	1.61	0.33	0.0	0.0	0.0	2.13	5.85
TOTAL	0.38	4.30	10.59	8.46	4.40	1.04	0.14	29.31	8.07

NUMBER OF CALMS - 8
NUMBER OF BAD HOURS - 6

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

STABILITY CLASS F
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.57	0.80	0.05	0.0	0.0	0.0	1.42	4.12
NNE	0.05	0.85	1.28	0.05	0.0	0.0	0.0	2.22	3.75
NE	0.0	0.38	0.47	0.0	0.0	0.0	0.0	0.85	3.79
ENE	0.0	0.28	0.43	0.0	0.0	0.0	0.0	0.71	4.36
E	0.0	0.05	0.14	0.0	0.0	0.0	0.0	0.19	3.91
ESE	0.0	0.09	0.14	0.0	0.0	0.0	0.0	0.24	3.35
SE	0.0	0.0	0.33	0.05	0.0	0.0	0.0	0.38	5.96
SSE	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.05	7.20
S	0.0	0.0	0.19	0.05	0.0	0.0	0.0	0.24	6.74
SSW	0.0	0.24	0.09	0.05	0.0	0.0	0.0	0.38	4.37
SW	0.0	0.28	1.13	0.33	0.0	0.0	0.0	1.75	5.58
WSW	0.0	0.24	0.95	0.24	0.0	0.0	0.0	1.42	5.18
W	0.0	0.43	0.47	0.0	0.0	0.0	0.0	0.90	3.75
WNW	0.0	0.19	0.66	0.0	0.0	0.0	0.0	0.85	4.32
NW	0.0	0.47	0.85	0.0	0.0	0.0	0.0	1.32	3.88
NNW	0.0	0.14	1.13	0.0	0.0	0.0	0.0	1.28	4.44
TOTAL	0.05	4.21	9.13	0.80	0.0	0.0	0.0	14.18	4.67

NUMBER OF CALMS - 1
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

STABILITY CLASS G
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.09	0.66	0.09	0.0	0.0	0.0	0.0	0.85	2.50
NNE	0.0	0.38	0.09	0.0	0.0	0.0	0.0	0.47	2.95
NE	0.0	0.09	0.05	0.0	0.0	0.0	0.0	0.14	3.54
ENE	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.14	2.22
E	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.05	4.08
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.05	1.35
S	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.05	1.40
SSW	0.0	0.14	0.09	0.0	0.0	0.0	0.0	0.24	3.28
SW	0.0	0.24	0.14	0.0	0.0	0.0	0.0	0.38	3.11
WSW	0.0	0.43	0.33	0.0	0.0	0.0	0.0	0.76	3.14
W	0.05	0.52	0.19	0.0	0.0	0.0	0.0	0.76	2.69
WNW	0.05	0.57	0.24	0.0	0.0	0.0	0.0	0.85	3.09
NW	0.09	0.95	0.52	0.0	0.0	0.0	0.0	1.56	3.13
NNW	0.09	1.04	0.47	0.0	0.0	0.0	0.0	1.61	3.24
TOTAL	0.38	5.25	2.27	0.0	0.0	0.0	0.0	7.90	2.64

NUMBER OF CALMS = 9
NUMBER OF BAD HOURS = 2

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 3/31/80

SUMMARY
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.09	1.65	3.07	3.03	0.66	0.0	0.0	8.51	7.05
NNE	0.05	1.75	2.93	3.83	0.76	0.0	0.0	9.31	7.36
NE	0.09	1.37	1.94	2.55	2.17	0.61	0.0	8.84	9.85
ENE	0.0	0.90	1.84	1.80	0.99	0.05	0.0	5.48	8.03
E	0.0	0.24	1.18	1.28	0.24	0.0	0.0	2.93	7.85
ESE	0.0	0.19	0.85	0.47	0.05	0.0	0.0	1.56	6.31
SE	0.0	0.24	1.37	0.90	0.05	0.0	0.0	2.55	6.81
SSE	0.0	0.09	0.85	0.38	0.80	0.0	0.0	2.13	9.71
S	0.0	0.09	0.66	0.43	0.47	0.57	0.0	2.22	12.31
SSW	0.0	0.71	0.51	1.09	0.61	0.38	0.14	3.55	10.60
SW	0.05	0.95	2.46	2.98	3.50	1.61	0.09	11.63	11.72
WSW	0.09	1.37	2.17	2.93	1.70	0.24	0.0	8.51	8.83
W	0.09	1.37	1.89	0.61	0.09	0.14	0.0	4.21	5.64
WNW	0.14	1.61	2.65	1.13	1.18	0.38	0.0	7.09	7.86
NW	0.14	2.13	3.59	4.16	1.37	0.05	0.05	11.49	7.66
NNW	0.09	1.56	4.59	2.93	0.76	0.05	0.0	9.98	7.07
TOTAL	0.85	16.12	32.67	30.59	15.41	4.07	0.28	100.00	8.46

NUMBER OF CALMS - 18
NUMBER OF BAD HOURS - 45

ENCLOSURE 2

JOINT FREQUENCY OF WIND DIRECTION AND SPEED
SECOND QUARTER 1980
BRUNSWICK STEAM ELECTRIC PLANT

The attached tables present the frequency of wind direction occurrences by wind speed class as recorded at the on-site meteorological system during the period April 1 through June 30, 1980.

The frequencies are presented as a percent of total occurrences for each stability class as well as a summary for all classes for each sensor elevation. The first eight tables are for the upper sensor elevation (100 meter); the last eight tables are for the lower (10 meter) sensor elevation.

Pertinent information available from the tables is as follows:

1. Stability

Percent occurrence Pasquill categories:

A	B	C	D	E	F	G
3.7	8.9	9.2	33.8	28.8	9.6	6.0

2. Wind Speed

	10 Meter	100 Meter
Average Speed (mph)	9.5	16.0
Percent Calm	0.1	0.0
Percent Less than 3.5 mph	9.4	0.2

3. Wind Direction

	10 Meter	100 Meter
Prevailing Direction	SW	SW
Percent Occurrence	25.4	23.6

4. Data Recovery

	10 Meter	100 Meter
Percent Good Hours	99.5	99.5

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS A
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.05	16.88
NNE	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.05	16.38
NE	0.0	0.0	0.0	0.0	0.09	0.05	0.0	0.14	18.73
ENE	0.0	0.0	0.0	0.0	0.14	0.0	0.0	0.14	14.96
E	0.0	0.0	0.05	0.14	0.28	0.0	0.0	0.46	11.60
ESE	0.0	0.0	0.0	0.18	0.23	0.0	0.0	0.41	12.78
SE	0.0	0.0	0.0	0.14	0.05	0.09	0.0	0.28	13.98
SSE	0.0	0.0	0.0	0.09	0.0	0.05	0.0	0.14	12.65
S	0.0	0.0	0.0	0.09	0.05	0.0	0.0	0.14	13.61
SSW	0.0	0.0	0.0	0.0	0.46	0.09	0.0	0.55	16.74
SW	0.0	0.0	0.0	0.0	0.64	0.37	0.18	1.20	20.45
WSW	0.0	0.0	0.0	0.0	0.09	0.05	0.0	0.14	16.29
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.05	15.63
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.05	0.64	2.16	0.69	0.18	3.73	15.44

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 11

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS B
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.0	0.05	0.05	0.0	0.0	0.09	12.53
NNE	0.0	0.0	0.0	0.05	0.09	0.0	0.0	0.14	12.28
NE	0.0	0.0	0.0	0.0	0.14	0.0	0.14	0.28	20.76
ENE	0.0	0.0	0.0	0.09	0.23	0.09	0.0	0.41	16.13
E	0.0	0.0	0.05	0.28	0.14	0.0	0.0	0.46	11.07
ESE	0.0	0.0	0.0	0.46	0.14	0.0	0.0	0.60	10.88
SE	0.0	0.0	0.05	0.14	0.05	0.05	0.0	0.28	12.28
SSE	0.0	0.0	0.0	0.05	0.05	0.0	0.0	0.09	12.86
S	0.0	0.0	0.0	0.32	0.09	0.05	0.0	0.46	12.68
SSW	0.0	0.0	0.0	0.18	0.92	0.41	0.0	1.52	16.22
SW	0.0	0.0	0.0	0.23	1.61	1.01	0.41	3.27	18.85
WSW	0.0	0.0	0.0	0.14	0.14	0.09	0.05	0.41	15.85
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.05	0.0	0.0	0.18	0.0	0.23	19.31
NW	0.0	0.0	0.09	0.09	0.14	0.0	0.05	0.37	13.51
NNW	0.0	0.0	0.0	0.14	0.14	0.0	0.0	0.28	13.13
TOTAL	0.0	0.0	0.23	2.21	3.91	1.89	0.64	8.88	14.56

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS C
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

PER

WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.05	0.0	0.05	0.0	0.0	0.09	11.89
NNE	0.0	0.0	0.0	0.0	0.18	0.0	0.0	0.18	15.59
NE	0.0	0.0	0.0	0.05	0.32	0.09	0.05	0.51	17.28
ENE	0.0	0.0	0.09	0.09	0.23	0.14	0.0	0.55	14.96
E	0.0	0.0	0.0	0.18	0.18	0.0	0.0	0.37	12.59
ESE	0.0	0.0	0.0	0.18	0.05	0.0	0.0	0.23	10.35
SE	0.0	0.0	0.05	0.28	0.18	0.05	0.0	0.55	12.31
SSE	0.0	0.0	0.05	0.14	0.0	0.0	0.0	0.18	9.89
S	0.0	0.0	0.0	0.09	0.18	0.18	0.0	0.46	17.01
SSW	0.0	0.0	0.0	0.41	0.60	0.64	0.0	1.66	17.26
SW	0.0	0.0	0.0	0.51	1.01	0.74	0.18	2.44	17.06
WSW	0.0	0.0	0.09	0.23	0.18	0.23	0.0	0.74	13.83
W	0.0	0.0	0.0	0.05	0.05	0.0	0.0	0.09	11.09
WNW	0.0	0.0	0.0	0.0	0.09	0.05	0.05	0.18	20.45
NW	0.0	0.0	0.09	0.28	0.05	0.05	0.0	0.46	10.02
NNW	0.0	0.0	0.0	0.18	0.28	0.0	0.0	0.46	13.49
TOTAL	0.0	0.0	0.41	2.57	3.64	2.15	0.28	9.16	14.07

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS D
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.14	0.55	0.87	0.23	0.0	1.79	13.33
NNE	0.0	0.0	0.09	0.14	0.83	0.23	0.0	1.29	15.27
NE	0.0	0.0	0.05	0.09	0.83	0.83	0.09	1.89	18.44
ENE	0.0	0.0	0.09	0.28	0.46	0.46	0.05	1.33	16.66
E	0.0	0.0	0.05	0.41	0.74	0.0	0.0	1.20	12.85
ESE	0.0	0.0	0.09	0.55	0.32	0.41	0.0	1.38	14.19
SE	0.0	0.0	0.09	0.09	0.51	0.28	0.0	0.97	15.82
SSE	0.0	0.0	0.05	0.14	0.09	0.0	0.05	0.32	13.51
S	0.0	0.0	0.0	0.69	0.23	0.37	0.46	1.75	18.42
SSW	0.0	0.0	0.0	1.06	1.89	1.79	0.60	5.34	17.97
SW	0.0	0.0	0.05	0.87	2.16	4.19	1.20	8.47	19.44
WSW	0.0	0.0	0.32	0.92	1.20	0.83	0.09	3.36	14.57
W	0.0	0.0	0.28	1.38	0.32	0.05	0.0	2.02	10.57
WNW	0.0	0.0	0.18	0.46	0.55	0.18	0.0	1.38	13.54
NW	0.0	0.0	0.09	0.28	0.14	0.05	0.0	0.55	11.63
NNW	0.0	0.0	0.18	0.18	0.32	0.09	0.0	0.78	12.17
TOTAL	0.0	0.0	1.75	8.10	11.46	9.99	2.53	33.82	14.90

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS E
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.0	0.0	0.23	0.18	0.0	0.41	17.52
NNE	0.0	0.0	0.0	0.23	0.55	0.14	0.0	0.92	15.00
NE	0.0	0.0	0.0	0.18	0.92	0.64	0.0	1.75	16.87
ENE	0.0	0.0	0.09	0.05	0.78	0.97	0.0	1.89	18.07
E	0.0	0.0	0.09	0.28	0.83	0.0	0.0	1.20	12.98
ESE	0.0	0.0	0.0	0.32	0.51	0.23	0.0	1.06	15.47
SE	0.0	0.0	0.05	0.18	0.83	0.78	0.0	1.84	17.31
SSE	0.0	0.0	0.05	0.09	0.18	0.37	0.09	0.78	18.39
S	0.0	0.0	0.05	0.14	0.28	0.60	0.55	1.61	21.83
SSW	0.0	0.0	0.0	0.37	1.89	0.51	0.14	2.90	16.47
SW	0.0	0.0	0.0	0.69	2.49	3.50	0.51	7.18	18.98
WSW	0.0	0.0	0.05	0.37	1.43	1.43	0.18	3.45	17.71
W	0.0	0.0	0.18	0.60	0.46	0.14	0.0	1.38	12.34
WNW	0.0	0.05	0.0	0.23	0.18	0.09	0.05	0.60	13.74
NW	0.0	0.0	0.05	0.23	0.37	0.14	0.0	0.78	14.10
NNW	0.0	0.0	0.09	0.18	0.60	0.18	0.0	1.06	14.57
TOTAL	0.0	0.05	0.69	4.14	12.52	9.89	1.52	28.81	16.34

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS F
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.05	0.05	0.05	0.18	0.14	0.0	0.46	14.52
NNE	0.0	0.0	0.0	0.09	0.23	0.18	0.0	0.51	16.08
NE	0.0	0.0	0.05	0.0	0.28	0.05	0.0	0.37	15.21
ENE	0.0	0.0	0.09	0.14	0.05	0.0	0.0	0.28	9.35
E	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.05	2.93
ESE	0.0	0.0	0.0	0.14	0.05	0.0	0.0	0.18	12.15
SE	0.0	0.0	0.0	0.23	0.09	0.0	0.0	0.32	10.91
SSE	0.0	0.0	0.09	0.28	0.18	0.09	0.0	0.64	12.07
S	0.0	0.0	0.05	0.05	0.18	0.0	0.0	0.28	11.87
SSW	0.0	0.0	0.0	0.28	0.37	0.0	0.0	0.64	12.58
SW	0.0	0.0	0.0	0.32	0.46	0.0	0.0	0.78	13.26
WSW	0.0	0.0	0.05	0.55	0.69	0.37	0.05	1.70	14.80
W	0.0	0.0	0.14	0.55	0.78	0.18	0.0	1.66	13.60
WNW	0.0	0.0	0.0	0.0	0.32	0.23	0.14	0.69	19.73
NW	0.0	0.0	0.0	0.05	0.28	0.41	0.0	0.74	18.94
NNW	0.0	0.0	0.0	0.09	0.14	0.09	0.0	0.32	14.88
TOTAL	0.0	0.09	0.51	2.81	4.28	1.75	0.18	9.62	13.30

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS 6
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.18	0.18	0.23	0.0	0.0	0.60	10.40
NNE	0.0	0.0	0.0	0.09	0.18	0.0	0.0	0.28	14.17
NE	0.0	0.0	0.14	0.23	0.28	0.05	0.0	0.69	12.03
ENE	0.0	0.0	0.0	0.14	0.18	0.0	0.0	0.32	12.47
E	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.09	4.29
ESE	0.0	0.0	0.28	0.14	0.0	0.0	0.0	0.41	7.34
SE	0.0	0.0	0.05	0.23	0.0	0.0	0.0	0.28	7.90
SSE	0.0	0.0	0.09	0.37	0.05	0.0	0.0	0.51	9.45
S	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.05	11.95
SSW	0.0	0.0	0.09	0.23	0.09	0.0	0.0	0.41	9.87
SW	0.0	0.0	0.05	0.05	0.14	0.0	0.0	0.23	12.31
WSW	0.0	0.05	0.09	0.18	0.0	0.0	0.0	0.32	8.26
W	0.0	0.0	0.05	0.28	0.23	0.14	0.0	0.69	13.52
WNW	0.0	0.0	0.0	0.0	0.14	0.28	0.05	0.46	20.74
NW	0.0	0.0	0.0	0.0	0.09	0.18	0.0	0.28	18.52
NNW	0.0	0.0	0.23	0.14	0.0	0.0	0.0	0.37	6.91
TOTAL	0.0	0.05	1.33	2.30	1.61	0.64	0.05	5.98	11.26

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

SUMMARY
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.05	0.41	0.83	1.66	0.55	0.0	3.50	13.47
NNE	0.0	0.0	0.09	0.60	2.12	0.55	0.0	3.36	15.14
NE	0.0	0.0	0.23	0.55	2.85	1.70	0.28	5.61	16.97
ENE	0.0	0.0	0.37	0.78	2.07	1.66	0.05	4.92	16.23
E	0.0	0.05	0.32	1.29	2.16	0.0	0.0	3.82	12.18
ESE	0.0	0.0	0.37	1.98	1.29	0.64	0.0	4.28	12.95
SE	0.0	0.0	0.28	1.29	1.70	1.24	0.0	4.51	14.84
SSE	0.0	0.0	0.32	1.15	0.55	0.51	0.14	2.67	13.51
S	0.0	0.0	0.09	1.43	1.01	1.20	1.01	4.74	18.30
SSW	0.0	0.0	0.09	2.53	6.21	3.45	0.74	13.02	16.77
SW	0.0	0.0	0.09	2.67	8.51	9.80	2.49	23.56	18.75
WSW	0.0	0.05	0.60	2.39	3.73	2.99	0.37	10.12	15.50
W	0.0	0.0	0.64	2.85	1.84	0.51	0.0	5.84	12.20
WNW	0.0	0.05	0.23	0.69	1.29	1.01	0.28	3.54	16.45
NW	0.0	0.0	0.32	0.92	1.10	0.83	0.05	3.22	14.53
NNW	0.0	0.0	0.51	0.92	1.47	0.37	0.0	3.27	12.89
TOTAL	0.0	0.18	4.97	22.87	39.58	27.01	5.[illegible]	100.00	16.00

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 11

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS A
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.09	12.26
NE	0.0	0.0	0.0	0.05	0.14	0.0	0.0	0.18	13.57
ENE	0.0	0.0	0.0	0.14	0.0	0.0	0.0	0.14	11.22
E	0.0	0.0	0.05	0.46	0.0	0.0	0.0	0.51	9.99
ESE	0.0	0.0	0.0	0.32	0.05	0.0	0.0	0.37	9.91
SE	0.0	0.0	0.05	0.18	0.09	0.0	0.0	0.32	10.33
SSE	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.09	8.96
S	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.05	10.13
SSW	0.0	0.0	0.0	0.09	0.51	0.0	0.0	0.60	14.01
SW	0.0	0.0	0.0	0.0	0.74	0.51	0.0	1.24	17.23
WSW	0.0	0.0	0.0	0.05	0.05	0.0	0.0	0.09	14.34
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.05	11.25
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.09	1.56	1.56	0.51	0.0	3.73	11.93

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 11

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS B
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.05	8.05
NNE	0.0	0.0	0.05	0.09	0.0	0.0	0.0	0.14	9.50
NE	0.0	0.0	0.0	0.09	0.18	0.05	0.0	0.32	14.28
ENE	0.0	0.0	0.05	0.18	0.09	0.05	0.0	0.37	12.86
E	0.0	0.0	0.09	0.46	0.05	0.0	0.0	0.60	9.05
ESE	0.0	0.0	0.05	0.41	0.0	0.0	0.0	0.46	8.70
SE	0.0	0.0	0.05	0.23	0.05	0.0	0.0	0.32	9.37
SSE	0.0	0.0	0.05	0.05	0.0	0.0	0.0	0.09	7.81
S	0.0	0.0	0.0	0.32	0.09	0.0	0.0	0.41	11.05
SSW	0.0	0.0	0.0	0.32	1.06	0.0	0.0	1.38	14.08
SW	0.0	0.0	0.05	0.74	1.89	0.78	0.05	3.50	15.68
WSW	0.0	0.0	0.05	0.05	0.23	0.0	0.0	0.32	13.29
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.09	0.0	0.23	0.05	0.0	0.37	13.17
NW	0.0	0.0	0.05	0.14	0.0	0.0	0.0	0.18	9.06
NNW	0.0	0.0	0.14	0.14	0.09	0.0	0.0	0.37	9.58
TOTAL	0.0	0.0	0.69	3.27	3.96	0.92	0.05	8.88	11.04

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS C
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.14	0.05	0.0	0.0	0.18	11.22
NE	0.0	0.0	0.09	0.23	0.37	0.0	0.0	0.69	12.18
ENE	0.0	0.0	0.0	0.32	0.18	0.0	0.0	0.5[illegible]	11.96
E	0.0	0.0	0.0	0.28	0.05	0.0	0.0	0.32	10.45
ESE	0.0	0.0	0.09	0.05	0.0	0.0	0.0	0.14	7.49
SE	0.0	0.0	0.14	0.51	0.05	0.0	0.0	0.69	8.74
SSE	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.09	9.46
S	0.0	0.0	0.0	0.18	0.28	0.0	0.0	0.46	13.88
SSW	0.0	0.0	0.0	0.41	0.92	0.09	0.0	1.43	14.42
SW	0.0	0.0	0.09	0.97	1.66	0.18	0.0	2.90	13.92
WSW	0.0	0.0	0.05	0.18	0.18	0.05	0.0	0.46	12.93
W	0.0	0.0	0.09	0.05	0.05	0.0	0.0	0.18	9.21
WNW	0.0	0.0	0.0	0.09	0.09	0.0	0.0	0.18	13.08
NW	0.0	0.0	0.28	0.14	0.05	0.0	0.0	0.46	7.76
NNW	0.0	0.0	0.14	0.28	0.05	0.0	0.0	0.46	9.20
TOTAL	0.0	0.0	0.97	3.91	3.96	0.32	0.0	9.15	11.06

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS D
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.64	0.87	0.05	0.0	0.0	1.56	8.04
NNE	0.0	0.0	0.28	0.74	0.18	0.0	0.0	1.20	9.24
NE	0.0	0.05	0.09	0.97	0.74	0.0	0.0	1.84	11.77
ENE	0.0	0.05	0.05	0.64	0.83	0.0	0.0	1.56	12.54
E	0.0	0.0	0.37	0.69	0.09	0.0	0.0	1.15	9.17
ESE	0.0	0.0	0.41	0.83	0.18	0.0	0.0	1.43	9.08
SE	0.0	0.0	0.28	0.83	0.0	0.0	0.0	1.10	8.58
SSE	0.0	0.0	0.09	0.09	0.09	0.0	0.0	0.28	10.13
S	0.0	0.0	0.37	0.55	0.83	0.23	0.0	1.98	12.20
SSW	0.0	0.0	0.09	2.21	2.53	0.23	0.0	5.06	13.08
SW	0.0	0.0	0.37	3.36	4.65	0.32	0.0	8.70	13.13
WSW	0.0	0.05	0.97	1.75	0.60	0.05	0.0	3.41	9.72
W	0.0	0.05	0.97	0.97	0.09	0.0	0.0	2.07	8.14
WNW	0.0	0.05	0.46	0.41	0.09	0.0	0.0	1.01	7.98
NW	0.0	0.0	0.51	0.37	0.05	0.0	0.0	0.92	7.91
NNW	0.0	0.0	0.37	0.18	0.0	0.0	0.0	0.55	6.97
TOTAL	0.0	0.23	6.30	15.46	11.00	0.83	0.0	33.82	9.85

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS E
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-#2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.0	0.69	0.23	0.0	0.0	0.0	0.92	6.68
NNE	0.0	0.14	0.83	0.14	0.0	0.0	0.0	1.10	5.65
NE	0.0	0.18	0.78	0.55	0.09	0.0	0.0	1.61	7.35
ENE	0.0	0.0	0.69	1.20	0.46	0.0	0.0	2.35	9.43
E	0.0	0.0	0.23	0.41	0.0	0.0	0.0	0.64	7.56
ESE	0.0	0.0	0.97	0.41	0.05	0.0	0.0	1.43	7.06
SE	0.0	0.05	0.51	0.64	0.0	0.0	0.0	1.20	7.76
SSE	0.0	0.05	0.18	0.51	0.14	0.0	0.0	0.87	9.12
S	0.0	0.05	0.41	0.64	0.60	0.05	0.0	1.75	10.45
SSW	0.0	0.09	0.69	1.56	0.18	0.0	0.0	2.53	8.74
SW	0.0	0.05	2.21	3.73	1.70	0.0	0.0	7.69	9.84
WSW	0.0	0.09	1.52	1.15	0.23	0.0	0.0	2.99	7.90
W	0.0	0.32	0.78	0.14	0.0	0.0	0.0	1.24	4.89
WNW	0.0	0.14	0.60	0.09	0.0	0.0	0.0	0.83	4.74
NW	0.0	0.18	0.74	0.18	0.0	0.0	0.0	1.10	5.23
NNW	0.0	0.14	0.37	0.05	0.0	0.0	0.0	0.55	5.08
TOTAL	0.0	1.47	12.20	11.64	3.45	0.05	0.0	28.81	7.34

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS F
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-#2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.28	0.32	0.0	0.0	0.0	0.0	0.60	4.25
NNE	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.05	5.68
NE	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.18	2.47
ENE	0.0	0.09	0.14	0.0	0.0	0.0	0.0	0.23	3.82
E	0.0	0.05	0.09	0.0	0.0	0.0	0.0	0.14	4.38
ESE	0.0	0.32	0.14	0.0	0.0	0.0	0.0	0.46	3.11
SE	0.0	0.05	0.18	0.0	0.0	0.0	0.0	0.23	4.78
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.46	0.0	0.0	0.0	0.0	0.0	0.46	2.53
SSW	0.0	0.18	0.0	0.0	0.0	0.0	0.0	0.18	1.77
SW	0.0	0.18	0.83	0.23	0.0	0.0	0.0	1.24	5.81
WSW	0.0	0.69	1.15	0.32	0.0	0.0	0.0	2.16	4.88
W	0.0	0.41	1.06	0.05	0.0	0.0	0.0	1.52	4.11
WNW	0.0	0.32	0.32	0.05	0.0	0.0	0.0	0.69	4.48
NW	0.0	0.23	0.41	0.0	0.0	0.0	0.0	0.64	3.98
NNW	0.0	0.28	0.55	0.0	0.0	0.0	0.0	0.83	4.19
TOTAL	0.0	3.73	5.25	0.64	0.0	0.0	0.0	9.62	4.02

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS G
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.41	0.18	0.0	0.0	0.0	0.0	0.60	3.05
NNE	0.0	0.32	0.18	0.0	0.0	0.0	0.0	0.51	2.79
NE	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.14	1.19
ENE	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.05	1.28
E	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.14	1.28
ESE	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.14	2.38
SE	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.09	1.71
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.09	1.04
SSW	0.0	0.14	0.05	0.0	0.0	0.0	0.0	0.18	2.83
SW	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.14	1.64
WSW	0.0	0.18	0.46	0.0	0.0	0.0	0.0	0.64	4.15
W	0.0	0.23	0.0	0.0	0.0	0.0	0.0	0.23	2.42
WNW	0.0	0.32	0.41	0.0	0.0	0.0	0.0	0.74	3.66
NW	0.05	0.83	0.41	0.0	0.0	0.0	0.0	1.29	3.19
NNW	0.0	0.64	0.37	0.0	0.0	0.0	0.0	1.01	3.28
TOTAL	0.05	3.87	2.07	0.0	0.0	0.0	0.0	5.98	2.39

NUMBER OF CALMS - 1
NUMBER OF BAD HOURS - 0

JOINT PERCENTAGE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 4/ 1/80 TO 11:00 PM 6/30/80

SUMMARY
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.0	0.69	1.84	1.15	0.05	0.0	0.0	3.73	6.30
NNE	0.0	0.46	1.38	1.20	0.23	0.0	0.0	3.27	7.18
NE	0.0	0.55	0.97	1.89	1.52	0.05	0.0	4.97	9.99
ENE	0.0	0.18	0.92	2.49	1.56	0.05	0.0	5.20	10.7
E	0.0	0.18	0.83	2.30	0.18	0.0	0.0	3.50	8.5
ESE	0.0	0.46	1.66	2.02	0.28	0.0	0.0	4.42	7.58
SE	0.0	0.18	1.20	2.39	0.18	0.0	0.0	3.96	8.19
SSE	0.0	0.05	0.32	0.83	0.23	0.0	0.0	1.43	9.24
S	0.0	0.60	0.78	1.75	1.79	0 28	0.0	5.20	10.59
SSW	0.0	0.41	0.83	4.60	5.20	0.32	0.0	11.37	12.10
SW	0.0	0.37	3.54	9.02	10.63	1.79	0.05	25.40	12.35
WSW	0.0	1.01	4.19	3.50	1.29	0.09	0.0	10.08	8.09
W	0.0	1.01	2.90	1.20	0.14	0.0	0.0	5.25	5.99
WNW	0.0	0.83	1.89	0.64	0.41	0.05	0.0	3.82	6.56
NW	0.05	1.24	2.39	0.87	0.09	0.0	0.0	4.65	5.50
NNW	0.0	1.06	1.93	0.64	0.14	0.0	0.0	3.77	5.62
TOTAL	0.05	9.30	27.57	36.49	23.93	2.62	0.05	100.00	9.52

NUMBER OF CALMS - 1
NUMBER OF BAD HOURS - 11

ENCLOSURE 3

DIFFUSION ANALYSIS
GROUND LEVEL RELEASE
JANUARY 1 - JUNE 30, 1980
BRUNSWICK STEAM ELECTRIC PLANT

Description of Attachments

The attached tables provide estimates of relative ground-level concentration (X/Q) and deposition (D/Q) for the period January 1 through June 30, 1980 for a ground-level release.

A description of the tables is as follows:

Table 1 - Undecayed, undepleted X/Q for standard distances.
Table 2 - 2.26-day decay, undepleted X/Q for standard distances.
Table 3 - 8.0-day decay, depleted X/Q for standard distances.
Table 4 - Deposition estimates for standard distances.
Table 5 - X/Q and D/Q estimates for site boundary locations and points of interest.

Method of Calculation

The ground-level release calculations represent sector averaged concentrations at the given distances from the center of the reactor buildings. The computer code used (XOQDOQ) was received from the U. S. Nuclear Regulatory Commission (NRC), Hydrology Meteorology Branch. (1)

Input variables included:

1. Wake correction factor from RG 1.111.
2. Assumed plant grade elevation throughout area, (i.e., no terrain).
3. Building height for wake correction = 56.9 meters.
4. Joint wind frequency from the ten-meter level on-site meteorological tower.

5. Sigma Z limited to 1000 meters.
6. Calm winds included with joint frequency and distributed according to the occurrence in the lowest non-calm speed class.

The adjustment factors to account for the straight-line flow model limitations (RG 1.111, Section C.1.c) were not applied. The code was modified to incorporate the revised curves for estimating plume depletion and ground deposition (XOQDOQ - ERRATA, November 8, 1976).

Relative Concentration Estimates

The site boundary distances used for the calculations are as prepared for the June 4, 1976, Appendix I submittal to the NRC. Speical point distances were obtained from the December 1978 site survey.

The maximum undepleted, undecayed X/Q value at the site boundary is 3.1E-06 in the SE sector. Site boundary maximums for previous six-month periods are as follows:

JUL - DEC 1978	3.3E-06	SSE Sector
JAN - JUN 1979	2.5E-06	SSE Secto
JUL - DEC 1979	3.5E-06	SSE Sector

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(1) Program for the Meteorological Evaluation of Routine Effluent Release at Nuclear Power Stations, J. F. Sagendorf and J. T. Goll, August 29, 1976.

PRINTOUT OF INPUT CARDS

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1     1000000600000300000000000300000600000011010000000000000011010000000000000000000000
2     XOQDOQ - BRUNSWICK GROUND AND MIXED MODE RELEASES 1/1/80-6/30/80
3        7    7   10 4288    5    5    2
4       11.00 101.00  2.26  -8.60
5        0.0      0.0      0.0      0.0      0.0      0.0      0.0
6     6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
7     6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
8     6  0.0    1.000  0.0    0.0    1.000  2.000  1.000  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
9     6  0.0    5.000  3.000  5.000  16.000 14.000 8.000  2.000  1.000  2.000  0.0    1.000  0.0    0.0    5.000  2.000  2.000
10    6  1.000  0.0    11.000 7.000  3.000  1.000  2.000  0.0    0.0    0.0    11.000 16.000 1.000  0.0    4.000  8.000  5.000
11    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    14.000 0.0    0.0    2.000  0.0    0.0
12    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
13    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
14    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
15    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
16    6  2.000  2.000  2.000  1.000  5.000  2.000  4.000  1.000  0.0    0.0    1.000  1.000  0.0    2.000  2.000  5.000
17    6  6.000  4.000  3.000  4.000  15.000 1.000  5.000  1.000  8.000  7.000  16.000 3.000  0.0    1.000  6.000  12.000
18    6  0.0    0.0    5.000  7.000  2.000  0.0    1.000  0.0    2.000  23.000 45.000 6.000  0.0    9.000  6.000  4.000
19    6  0.0    0.0    1.000  1.000  0.0    0.0    0.0    0.0    0.0    0.0    24.000 0.0    0.0    1.000  0.0    1.000
20    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    1.000  0.0    0.0    0.0    0.0    0.0
21    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
22    6  2.000  1.000  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    2.000
23    6  1.000  1.000  4.000  3.000  2.000  6.000  4.000  3.000  0.0    0.0    2.000  1.000  3.000  2.000  10.000 11.000
24    6  4.000  13.000 7.000  11.000 7.000  1.000  11.000 2.000  5.000  12.000 21.000 6.000  2.000  5.000  15.000 15.000
25    6  3.000  2.000  12.000 5.000  1.000  0.0    1.000  0.0    6.000  20.000 41.000 7.000  1.000  4.000  8.000  1.000
26    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    3.000  9.000  1.000  0.0    0.0    1.000  0.0
27    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    1.000  0.0
28    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
29    6  2.000  5.000  8.000  6.000  1.000  1.000  0.0    0.0    0.0    2.000  0.0    3.000  4.000  11.000 5.000  2.000
30    6  36.000 19.000 16.000 15.000 19.000 16.000 13.000 8.000  15.000 7.000  14.000 25.000 30.000 23.000 26.000 27.000
31    6  70.000 68.000 61.000 39.000 26.000 19.000 18.000 3.000  18.000 59.000 89.000 57.000 26.000 18.000 60.000 34.000
32    6  11.000 16.000 42.000 24.000 3.000  4.000  0.0    8.000  21.000 57.000127.000 34.000 3.000  12.000 9.000  9.000
33    6  0.0    0.0    13.000 1.000  0.0    0.0    0.0    0.0    7.000  6.000  20.000 6.000  3.000  6.000  0.0    0.0
34    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    1.000  1.000  0.0    0.0    0.0    0.0    0.0
35    6  0.0    1.000  2.000  0.0    0.0    0.0    0.0    0.0    0.0    0.0    1.000  1.000  1.000  1.000  1.000  0.0
36    6  5.000  8.000  16.000 3.000  3.000  1.000  6.000  2.000  2.000  7.000  10.000 15.000 13.000 11.000 14.000 7.000
37    6  36.000 35.000 29.000 28.000 10.000 22.000 18.000 12.000 12.000 19.000 67.000 48.000 33.000 35.000 43.000 42.000
38    6  8.000  16.000 23.000 33.000 13.000 9.000  28.000 18.000 14.000 42.000121.000 59.000 8.000  13.000 19.000 8.000
39    6  0.0    3.000  8.000  12.000 0.0    2.000  1.000  14.000 20.000 15.000 76.000 16.000 1.000  0.0    0.0    0.0
40    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    11.000 6.000  6.000  0.0    0.0    0.0    0.0    0.0
41    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    2.000  1.000  0.0    0.0    0.0    0.0
42    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    1.000  0.0    0.0    0.0    0.0
43    6  16.000 18.000 12.000 8.000  2.000  9.000  1.000  0.0    10.000 9.000  10.000 20.000 18.000 11.000 15.000 9.000
44    6  24.000 28.000 10.000 12.000 5.000  6.000  11.000 1.000  4.000  2.000  42.000 45.000 33.000 21.000 27.000 36.000
45    6  1.000  1.000  0.0    0.0    0.0    0.0    1.000  0.0    1.000  1.000  12.000 12.000 1.000  1.000  0.0    0.0
46    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
47    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
48    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
49    6  2.000  1.000  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    1.000  1.000  2.000  2.000
50    6  23.000 15.000 5.000  4.000  3.000  3.000  2.000  1.000  3.000  6.000  8.000  13.000 16.000 19.000 38.000 36.000
51    6  6.000  6.000  1.000  0.0    1.000  0.0    0.0    0.0    0.0    3.000  3.000  17.000 4.000  14.000 20.000 18.000
52    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
53    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
54    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
55    6  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
56    7  200.   0.750  3.500  7.500  12.500 18.500 25.000 26.000 0.0    0.0    0.0    0.0    0.0    0.0    0.0
57   10  402.   402.   402.   402.   402.   402.   402.   402.   402.   402.   402.   402.   402.   402.   402.   402.
58   12  6.     6.     6.     6.     6.     6.     6.     6.     6.     6.     6.     6.     6.     6.     6.     6.
59   10  1207.  1207.  1207.  1175.  1078.  966.   966.   982.   998.   1014.  1014.  1014.  1078.  1094.  1078.  1110.
60   11  6.     6.     6.     6.     6.     6.     8.           6.     6.     6.     6.     6.     7.     6.     6
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 10      1674.   1545.   1432.   1191.   1110.   1030.   1127.   1030.   1030.   1030.   1207.   1076.   1076.   1110.   1071.   1143.
 11         6.      6.      6.      6.      6.      6.      8.      6.      6.      6.      6.      6.      6.      7.      6.      6.
 10      2012.   2012.   1674.   1207.   1207.   1207.   1207.   1207.   1207.   1207.   1465.   1207.   1207.   1207.   1207.   1207.
 11         6.      6.      6.      6.      6.      6.      8.      6.      6.      6.      6.      6.      6.      7.      6.      6.
 10      2382.   2317.   2012.   1609.   1400.   1271.   1287.   1368.   1368.   1465.   2012.   2012.   1513.   2012.   1271.   1271.
 11         6.      6.      6.      6.      6.      6.      8.      6.      6.      6.      6.      7.      7.      9.      6.      6.
 10      2527.   2816.   2736.   2012.   1736.   1304.   2012.   1561.   1416.   1770.   2816.   2816.   2012.   2816.   1520.   1287.
 11         6.      6.      6.      6.      6.      6.      9.      6.      6.      6.      6.      9.      7.     10.      6.      6.
 10      2816.   3621.   2816.   2816.   2012.   2012.   2816.   2012.   2012.   2012.   3605.   3621.   2816.   3621.   1513.   2012.
 11         6.      6.      6.      6.      6.      6.     10.      7.      6.      6.      6.      8.      8.     10.      6.      6.
 10      3621.   4426.   3621.   3621.   2816.   2816.   3621.   2816.   2816.   2237.   3621.   4426.   3621.   4426.   2012.   2816.
 11         6.      6.      6.      6.     11.      7.     10.      9.      6.      6.      6.      8.      8.     10.      6.      6.
 10      4426.   5230.   4426.   4426.   3621.   3621.   4426.   3621.   3621.   2816.   4426.   5230.   4426.   5230.   2816.   3621.
 11         6.      6.      6.      6.     12.     11.     12.     10.     10.      6.      6.      8.      8.     10.      6.      6.
 10      5230.   6035.   5230.   5230.   4426.   4426.   5230.   4426.   4426.   3621.   5230.   6035.   5230.   6035.   3621.   4426.
 11         6.      6.      6.      6.     12.     13.     12.     11.     10.      7.      9.      8.      6.     10.      6.      6.
 12        16       1       5      14      11
 13      SITE BOUNDARY
 14          1 1.04     2 0.96     3 0.89     4 0.77     5 0.69     6 0.64     7 0.70     8 0.64
 14      9 0.64    10 0.64    11 0.91    12 0.67    13 0.68    14 0.68    15 0.67    16 0.74
 13      MILK COW
 14         16 0.79
 13      MEAT ANIMAL
 14          3 1.70     5 1.68    10 1.10    15 0.79    16 0.80
 13      RESIDENCE
 14          1 1.48     2 1.44     3 0.89     4 1.00     5 0.87     6 0.79     7 0.80     8 0.85
 14      9 0.88    10 0.91    11 2.24    13 0.94    15 0.82    16 0.79
 13      GARDEN
 14          1 1.57     2 1.44     3 1.04     4 1.00     5 0.87     6 0.81     7 5.00     8 0.97
 14      9 0.85    10 1.39    15 0.94
 15      EXIT ONE- GROUND LEVEL RELEASE-- 1/1/80-6/30/80
 16         0.0     0.0     0.0    56.900  2120.0    10.0     0.0
 17      A    0       0       0
 15      EXIT TWO MIXED-MODE RELEASE 1/1/80-6/30/80
 16        21.340   6.000  57.520  56.910  2120.0    11.0     0.0
 17      S    0       0       0
```

XOQ002 - BRUNSWICK GROUND AND MIXED MODE RELEABES 1/1/80-6/30/80

THE JOINT FREQUENCY DISTRIBUTION, I=WIND SPEED CLASS, J= STABILITY CLASS

DIRECTION = N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
I= 1,J= 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 2,J= 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 3,J= 1	0.0	0.02	0.0	0.0	0.02	0.05	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 4,J= 1	0.0	0.12	0.07	0.12	0.37	0.33	0.19	0.05	0.02	0.05	0.0	0.02	0.0	0.0	0.12	0.05
I= 5,J= 1	0.02	0.0	0.26	0.16	0.07	0.02	0.05	0.0	0.0	0.26	0.37	0.02	0.0	0.09	0.19	0.12
I= 6,J= 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	0.0	0.0	0.05	0.0	0.0
I= 7,J= 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 1,J= 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 2,J= 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 3,J= 2	0.05	0.05	0.05	0.02	0.12	0.05	0.09	0.02	0.0	0.0	0.02	0.02	0.0	0.05	0.05	0.12
I= 4,J= 2	0.14	0.09	0.07	0.09	0.35	0.26	0.12	0.02	0.19	0.16	0.37	0.07	0.0	0.02	0.19	0.28
I= 5,J= 2	0.0	0.0	0.14	0.16	0.05	0.0	0.02	0.0	0.05	0.54	1.05	0.14	0.0	0.21	0.14	0.09
I= 6,J= 2	0.0	0.0	0.02	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.56	0.0	0.0	0.02	0.0	0.02
I= 7,J= 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0
I= 1,J= 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 2,J= 3	0.05	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05
I= 3,J= 3	0.02	0.02	0.09	0.07	0.05	0.14	0.19	0.07	0.0	0.0	0.05	0.02	0.07	0.05	0.23	0.26
I= 4,J= 3	0.09	0.30	0.16	0.26	0.16	0.02	0.26	0.05	0.12	0.28	0.49	0.14	0.05	0.12	0.35	0.35
I= 5,J= 3	0.07	0.05	0.28	0.12	0.02	0.0	0.02	0.0	0.14	0.47	0.96	0.16	0.02	0.21	0.19	0.02
I= 6,J= 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.21	0.02	0.0	0.0	0.02	0.0
I= 7,J= 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0
I= 1,J= 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0
I= 2,J= 4	0.05	0.12	0.19	0.14	0.02	0.02	0.0	0.0	0.0	0.05	0.0	0.07	0.09	0.26	0.12	0.05
I= 3,J= 4	0.84	0.44	0.37	0.35	0.44	0.37	0.30	0.19	0.35	0.16	0.33	0.58	0.70	0.54	0.61	0.63
I= 4,J= 4	1.63	1.59	1.42	0.91	0.61	0.44	0.42	0.07	0.42	1.38	2.08	1.33	0.65	0.42	1.40	0.91
I= 5,J= 4	0.26	0.37	0.98	0.56	0.07	0.02	0.0	0.19	0.49	1.33	2.96	0.79	0.07	0.28	0.21	0.21
I= 6,J= 4	0.0	0.0	0.30	0.02	0.0	0.0	0.0	0.0	0.16	0.14	0.47	0.14	0.07	0.14	0.0	0.0
I= 7,J= 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.0	0.0	0.0	0.0	0.0
I= 1,J= 5	0.0	0.02	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.02	0.02	0.02	0.0
I= 2,J= 5	0.12	0.19	0.37	0.07	0.07	0.02	0.14	0.05	0.05	0.16	0.23	0.35	0.30	0.26	0.33	0.16
I= 3,J= 5	0.84	0.82	0.66	0.65	0.23	0.51	0.42	0.28	0.28	0.44	1.56	1.12	0.77	0.82	1.00	0.98
I= 4,J= 5	0.19	0.37	0.54	0.77	0.30	0.21	0.65	0.42	0.33	0.98	2.82	1.38	0.19	0.30	0.44	0.19
I= 5,J= 5	0.0	0.07	0.19	0.26	0.0	0.05	0.02	0.33	0.47	0.35	1.77	0.37	0.02	0.0	0.0	0.0
I= 6,J= 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.14	0.14	0.0	0.0	0.0	0.0	0.0
I= 7,J= 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.02	0.0	0.0	0.0	0.0	0.0
I= 1,J= 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.0
I= 2,J= 6	0.42	0.42	0.28	0.19	0.05	0.21	0.02	0.0	0.23	0.21	0.23	0.47	0.42	0.26	0.35	0.21
I= 3,J= 6	0.56	0.65	0.23	0.28	0.12	0.14	0.26	0.02	0.09	0.05	0.98	1.05	0.77	0.49	0.63	0.84
I= 4,J= 6	0.02	0.02	0.0	0.0	0.0	0.0	0.02	0.0	0.02	0.02	0.28	0.28	0.02	0.02	0.0	0.0
I= 5,J= 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 6,J= 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 7,J= 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 1,J= 7	0.05	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.05	0.05
I= 2,J= 7	0.54	0.35	0.12	0.09	0.07	0.07	0.05	0.02	0.07	0.14	0.19	0.30	0.37	0.44	0.89	0.84
I= 3,J= 7	0.14	0.14	0.02	0.0	0.02	0.0	0.0	0.0	0.0	0.07	0.07	0.40	0.09	0.33	0.47	0.42
I= 4,J= 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 5,J= 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 6,J= 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 7,J= 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	6.09	6.27	6.88	5.34	3.22	3.01	3.26	1.77	3.73	7.51	18.61	9.31	4.73	5.43	8.00	6.83

TOTAL HOURS CONSIDERED ARE 4288

WIND MEASURED AT 11.0 METERS.

THE MAXIMUM WIND SPEED (METERS/SEC) IN EACH CLASS IS: 0.335 1.565 3.353 5.588 8.270 11.176 11.623

THE CONVERSION FACTOR APPLIED TO THE WIND SPEED CLASSES IS 0.447

DISTANCES AND TERRAIN HEIGHTS IN METERS AS FUNCTIONS OF DIRECTION FROM THE SITE:

DIRECTION =	S	SSW	SW	WSW	W	WNW	NW	NNW	N	NNE	NE	ENE	E	ESE	SE	SSE
DISTANCE	402.	402.	402.	402.	402.	402.	402.	402.	402.	402.	402.	402.	402.	402.	402.	402.
ELEVATION	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.
DISTANCE	1207.	1207.	1207.	1175.	1078.	966.	966.	982.	998.	1014.	1014.	1014.	1078.	1094.	1078.	1110.
ELEVATION	6.	6.	6.	6.	6.	6.	8.	6.	6.	6.	6.	6.	6.	7.	6.	6.
DISTANCE	1674.	1545.	1432.	1191.	1110.	1030.	1127.	1030.	1030.	1030.	1207.	1078.	1094.	1110.	1094.	1191.
ELEVATION	6.	6.	6.	6.	6.	6.	8.	6.	6.	6.	6.	6.	6.	7.	6.	6.
DISTANCE	2012.	2012.	1674.	1207.	1207.	1207.	1207.	1207.	1207.	1207.	1465.	1207.	1207.	1207.	1207.	1207.
ELEVATION	6.	6.	6.	6.	6.	6.	8.	6.	6.	6.	6.	6.	6.	7.	6.	6.
DISTANCE	2382.	2317.	2012.	1609.	1400.	1271.	1287.	1368.	1368.	1465.	2012.	2012.	1513.	2012.	1271.	1271.
ELEVATION	6.	6.	6.	6.	6.	6.	8.	6.	6.	6.	6.	7.	7.	9.	6.	6.
DISTANCE	2527.	2816.	2730.	2012.	1738.	1304.	2012.	1561.	1416.	1770.	2816.	2816.	2012.	2816.	1320.	1287.
ELEVATION	6.	6.	6.	6.	6.	6.	9.	6.	6.	6.	6.	8.	7.	10.	6.	6.
DISTANCE	2816.	3621.	2816.	2816.	2012.	2012.	2816.	2012.	2012.	2012.	3605.	3621.	2816.	3621.	1513.	2012.
ELEVATION	6.	6.	6.	6.	6.	6.	10.	7.	6.	6.	6.	6.	8.	10.	6.	6.
DISTANCE	3621.	4426.	3621.	3621.	2816.	2816.	3621.	2816.	2816.	2237.	3621.	4426.	3621.	4426.	2012.	2816.
ELEVATION	6.	6.	6.	6.	11.	7.	10.	9.	6.	6.	6.	8.	8.	10.	6.	6.
DISTANCE	4426.	5230.	4426.	4426.	3621.	3621.	4426.	3621.	3621.	2816.	4426.	5230.	4426.	5230.	2816.	3621.
ELEVATION	6.	6.	6.	6.	12.	11.	12.	10.	10.	6.	6.	8.	8.	10.	6.	6.
DISTANCE	5230.	6035.	5230.	5230.	4426.	4426.	5230.	4426.	4426.	3621.	5230.	6035.	5230.	6035.	3621.	4426.
ELEVATION	6.	6.	6.	6.	12.	13.	12.	11.	10.	7.	9.	8.	8.	10.	6.	6.

EXIT ONE- GROUND LEVEL RELEASE-- 1/1/80-6/30/80
NO DECAY, UNDEPLETED

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.242E-05	3.792E-06	1.906E-06	1.237E-06	6.834E-07	4.686E-07	3.503E-07	2.763E-07	2.282E-07	1.903E-07	1.634E-07
SSW	1.082E-05	3.344E-06	1.715E-06	1.124E-06	6.264E-07	4.261E-07	3.164E-07	2.483E-07	2.023E-07	1.695E-07	1.451E-07
SW	7.568E-06	2.457E-06	1.325E-06	8.755E-07	4.879E-07	3.249E-07	2.371E-07	1.835E-07	1.488E-07	1.226E-07	1.040E-07
WSW	4.948E-06	1.595E-06	8.471E-07	5.591E-07	3.115E-07	2.077E-07	1.518E-07	1.176E-07	9.479E-08	7.870E-08	6.682E-08
W	2.637E-06	8.408E-07	4.404E-07	2.857E-07	1.564E-07	1.039E-07	7.575E-08	5.859E-08	4.720E-08	3.917E-08	3.324E-08
WNW	3.331E-06	1.042E-06	5.414E-07	3.582E-07	2.009E-07	1.348E-07	9.905E-08	7.705E-08	6.234E-08	5.192E-08	4.421E-08
NW	2.965E-06	9.457E-07	5.077E-07	3.337E-07	1.850E-07	1.228E-07	8.943E-08	6.911E-08	5.562E-08	4.611E-08	3.910E-08
NNW	1.367E-06	4.463E-07	2.488E-07	1.632E-07	9.006E-08	5.955E-08	4.326E-08	3.334E-08	2.677E-08	2.215E-08	1.875E-08
N	3.457E-06	1.097E-06	5.755E-07	3.819E-07	2.144E-07	1.439E-07	1.057E-07	8.216E-08	6.645E-08	5.532E-08	4.706E-08
NNE	5.670E-06	1.821E-06	9.645E-07	6.309E-07	3.483E-07	2.323E-07	1.699E-07	1.317E-07	1.063E-07	8.829E-08	7.502E-08
NE	1.293E-05	4.137E-06	2.220E-06	1.466E-06	8.168E-07	5.441E-07	3.974E-07	3.077E-07	2.480E-07	2.059E-07	1.748E-07
ENE	1.357E-05	4.210E-06	2.196E-06	1.453E-06	8.189E-07	5.553E-07	4.112E-07	3.218E-07	2.617E-07	2.189E-07	1.870E-07
E	1.074E-05	3.298E-06	1.692E-06	1.112E-06	6.228E-07	4.251E-07	3.164E-07	2.487E-07	2.030E-07	1.703E-07	1.459E-07
ESE	1.121E-05	3.465E-06	1.777E-06	1.153E-06	6.362E-07	4.336E-07	3.226E-07	2.535E-07	2.069E-07	1.736E-07	1.487E-07
SE	1.114E-05	5.185E-06	2.613E-06	1.682E-06	9.234E-07	6.348E-07	4.756E-07	3.759E-07	3.082E-07	2.597E-07	2.233E-07
SSE	1.508E-05	4.521E-06	2.250E-06	1.442E-06	7.892E-07	5.446E-07	4.093E-07	3.243E-07	2.664E-07	2.248E-07	1.936E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.427E-07	8.483E-08	5.883E-08	3.527E-08	2.461E-08	1.865E-08	1.488E-08	1.231E-08	1.044E-08	9.034E-09	7.946E-09
SSW	1.263E-07	7.428E-08	5.111E-08	3.052E-08	2.101E-08	1.583E-08	1.258E-08	1.036E-08	8.763E-09	7.563E-09	6.632E-09
SW	8.985E-08	5.130E-08	3.458E-08	1.993E-08	1.354E-08	1.005E-08	7.883E-09	6.426E-09	5.387E-09	4.613E-09	4.016E-09
WSW	5.775E-08	3.307E-08	2.234E-08	1.293E-08	8.806E-09	6.551E-09	5.150E-09	4.206E-09	3.531E-09	3.027E-09	2.639E-09
W	2.674E-08	1.652E-08	1.120E-08	6.513E-09	4.457E-09	3.328E-09	2.625E-09	2.150E-09	1.810E-09	1.555E-09	1.359E-09
WNW	3.831E-08	2.217E-08	1.509E-08	8.817E-09	6.048E-09	4.523E-09	3.571E-09	2.927E-09	2.465E-09	2.119E-09	1.852E-09
NW	3.376E-08	1.929E-08	1.301E-08	7.518E-09	5.126E-09	3.816E-09	3.002E-09	2.452E-09	2.059E-09	1.766E-09	1.540E-09
NNW	1.616E-08	9.156E-09	6.140E-09	3.517E-09	2.380E-09	1.761E-09	1.378E-09	1.121E-09	9.384E-10	8.023E-10	6.976E-10
N	4.078E-08	2.354E-08	1.599E-08	9.312E-09	6.371E-09	4.754E-09	3.747E-09	3.066E-09	2.579E-09	2.215E-09	1.933E-09
NNE	6.489E-08	3.736E-08	2.527E-08	1.469E-08	1.004E-08	7.493E-09	5.905E-09	4.833E-09	4.065E-09	3.491E-09	3.048E-09
NE	1.511E-07	8.655E-08	5.849E-08	3.385E-08	2.306E-08	1.716E-08	1.349E-08	1.102E-08	9.248E-09	7.929E-09	6.911E-09
ENE	1.626E-07	9.499E-08	6.507E-08	3.834E-08	2.642E-08	1.983E-08	1.570E-08	1.289E-08	1.088E-08	9.307E-09	8.197E-09
E	1.271E-07	7.497E-08	5.168E-08	3.072E-08	2.130E-08	1.606E-08	1.277E-08	1.052E-08	8.902E-09	7.685E-09	6.740E-09
ESE	1.297E-07	7.651E-08	5.280E-08	3.145E-08	2.185E-08	1.650E-08	1.313E-08	1.084E-08	9.180E-09	7.933E-09	6.964E-09
SE	1.952E-07	1.166E-07	8.111E-08	4.885E-08	3.420E-08	2.598E-08	2.077E-08	1.721E-08	1.462E-08	1.267E-08	1.115E-08
SSE	1.695E-07	1.018E-07	7.107E-08	4.301E-08	3.023E-08	2.302E-08	1.845E-08	1.531E-08	1.303E-08	1.130E-08	9.966E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES .5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.029E-06	7.110E-07	3.523E-07	2.266E-07	1.637E-07	8.613E-08	3.577E-08	1.873E-08	1.233E-08	9.050E-09
SSW	1.814E-06	6.480E-07	3.184E-07	2.030E-07	1.454E-07	7.555E-08	3.080E-08	1.591E-08	1.038E-08	7.574E-09
SW	1.377E-06	5.016E-07	2.391E-07	1.484E-07	1.043E-07	5.243E-08	2.034E-08	1.011E-08	6.447E-09	4.621E-09
WSW	8.852E-07	3.204E-07	1.530E-07	9.516E-08	6.698E-08	3.379E-08	1.319E-08	6.592E-09	4.218E-09	3.033E-09
W	4.606E-07	1.618E-07	7.638E-08	4.739E-08	3.333E-08	1.687E-08	6.641E-09	3.348E-09	2.136E-09	1.558E-09
WNW	5.712E-07	2.065E-07	9.978E-08	6.258E-08	4.431E-08	2.261E-08	8.980E-09	4.549E-09	2.935E-09	2.122E-09
NW	5.277E-07	1.904E-07	9.019E-08	5.585E-08	3.920E-08	1.971E-08	7.675E-09	3.840E-09	2.459E-09	1.769E-09
NNW	2.551E-07	9.276E-08	4.363E-08	2.688E-08	1.879E-08	9.372E-09	3.594E-09	1.773E-09	1.125E-09	8.038E-10
N	6.053E-07	2.203E-07	1.065E-07	6.670E-08	4.719E-08	2.401E-08	9.488E-09	4.783E-09	3.075E-09	2.218E-09
NNE	1.006E-06	3.595E-07	1.712E-07	1.067E-07	7.520E-08	3.809E-08	1.498E-08	7.538E-09	4.845E-09	3.497E-09
NE	2.311E-06	8.398E-07	4.007E-07	2.490E-07	1.752E-07	8.841E-08	3.453E-08	1.727E-08	1.105E-08	7.943E-09
ENE	2.311E-06	8.427E-07	4.139E-07	2.626E-07	1.874E-07	9.671E-08	3.898E-08	1.993E-08	1.293E-08	9.381E-09
E	1.791E-06	6.437E-07	3.183E-07	2.036E-07	1.462E-	7.622E-08	3.115E-08	1.614E-08	1.055E-08	7.65 09

ESE	1.875E-06	5.810E-07	3.249E-07	2.047E-07	1.490E-07	1.111E-07	3.193E-08	1.650E-08	1.066E-08	7.745E-09
SE	2.770E-06	9.636E-07	4.782E-07	3.091E-07	2.237E-07	1.183E-07	4.951E-08	2.609E-08	1.724E-08	1.269E-08
SSE	2.396E-06	8.256E-07	4.113E-07	2.671E-07	1.939E-07	1.072E-07	4.357E-08	2.311E-08	1.534E-08	1.132E-08

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	0.0	REF. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	0.0	BUILDING HEIGHT	(METERS)	56.9
EXIT VELOCITY	(METERS)	0.0	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	2120.0
			HEAT EMISSION RATE	(CAL/SEC)	0.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)			
ELEVATED	LESS THAN	0.0		
MIXED	BETWEEN	0.0	AND	0.0
GROUND LEVEL	ABOVE	0.0		

AT THE MEASURED WIND HEIGHT (11.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC)				WIND SPEED (METERS/SEC)			
	STABLE CONDITIONS				UNSTABLE/NEUTRAL CONDITIONS			
ELEVATED	LESS THAN	0.0			LESS THAN	0.0		
MIXED	BETWEEN	0.0	AND	0.0	BETWEEN	0.0	AND	0.0
GROUND LEVEL	ABOVE	0.0			ABOVE	0.0		

EXIT ONE- GROUND LEVEL RELEASE-- 1/1/80-6/30/80
2.260 DAY DECAY, UNDEPLETED

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.239E-05	3.774E-06	1.896E-06	1.226E-06	6.749E-07	4.606E-07	3.427E-07	2.691E-07	2.193E-07	1.836E-07	1.569E-07
SSW	1.080E-05	3.330E-06	1.705E-06	1.115E-06	6.191E-07	4.194E-07	3.102E-07	2.424E-07	1.967E-07	1.642E-07	1.399E-07
SW	7.554E-06	2.448E-06	1.317E-06	8.689E-07	4.824E-07	3.200E-07	2.327E-07	1.794E-07	1.439E-07	1.190E-07	1.006E-07
WSW	4.943E-06	1.592E-06	8.449E-07	5.571E-07	3.098E-07	2.062E-07	1.504E-07	1.163E-07	9.357E-08	7.754E-08	6.571E-08
W	2.635E-06	8.393E-07	4.393E-07	2.847E-07	1.556E-07	1.031E-07	7.507E-08	5.796E-08	4.660E-08	3.859E-08	3.269E-08
WNW	3.328E-06	1.040E-06	5.399E-07	3.568E-07	1.997E-07	1.337E-07	9.804E-08	7.610E-08	6.144E-08	5.106E-08	4.338E-08
NW	2.963E-06	9.442E-07	5.065E-07	3.326E-07	1.841E-07	1.220E-07	8.871E-08	6.843E-08	5.498E-08	4.550E-08	3.852E-08
NNW	1.366E-06	4.477E-07	2.483E-07	1.628E-07	8.970E-08	5.923E-08	4.296E-08	3.306E-08	2.651E-08	2.190E-08	1.851E-08
N	3.454E-06	1.095E-06	5.739E-07	3.805E-07	2.132E-07	1.428E-07	1.046E-07	8.120E-08	6.553E-08	5.444E-08	4.624E-08
NNE	5.665E-06	1.817E-06	9.620E-07	6.287E-07	3.464E-07	2.306E-07	1.683E-07	1.302E-07	1.049E-07	8.698E-08	7.376E-08
NE	1.292E-05	4.129E-06	2.213E-06	1.460E-06	8.122E-07	5.400E-07	3.936E-07	3.042E-07	2.447E-07	2.027E-07	1.717E-07
ENE	1.355E-05	4.191E-06	2.180E-06	1.444E-06	8.113E-07	5.484E-07	4.048E-07	3.159E-07	2.561E-07	2.135E-07	1.819E-07
E	1.072E-05	3.285E-06	1.681E-06	1.103E-06	6.152E-07	4.182E-07	3.100E-07	2.427E-07	1.972E-07	1.646E-07	1.406E-07
ESE	1.116E-05	3.449E-06	1.765E-06	1.143E-06	6.278E-07	4.259E-07	3.155E-07	2.468E-07	2.005E-07	1.675E-07	1.429E-07
SE	1.710E-05	5.162E-06	2.596E-06	1.667E-06	9.117E-07	6.240E-07	4.655E-07	3.663E-07	2.990E-07	2.508E-07	2.147E-07
SSE	1.505E-05	4.502E-06	2.236E-06	1.430E-06	7.799E-07	5.359E-07	4.010E-07	3.164E-07	2.588E-07	2.175E-07	1.865E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.363E-07	7.920E-08	5.367E-08	3.076E-08	2.056E-08	1.495E-08	1.147E-08	9.133E-09	7.475E-09	6.248E-09	5.310E-09
SSW	1.213E-07	6.988E-08	4.713E-08	2.689E-08	1.795E-08	1.305E-08	1.002E-08	7.989E-09	6.548E-09	5.481E-09	4.666E-09
SW	8.653E-08	4.851E-08	3.213E-08	1.790E-08	1.177E-08	8.474E-09	6.455E-09	5.115E-09	4.172E-09	3.478E-09	2.951E-09
WSW	5.669E-08	3.215E-08	2.151E-08	1.220E-08	8.147E-09	5.941E-09	4.579E-09	3.617E-09	2.930E-09	2.436E-09	2.068E-09
W	2.821E-08	1.606E-08	1.078E-08	6.145E-09	4.122E-09	3.017E-09	2.332E-09	1.872E-09	1.545E-09	1.302E-09	1.115E-09
WNW	3.751E-08	2.147E-08	1.443E-08	8.257E-09	5.539E-09	4.050E-09	3.127E-09	2.506E-09	2.063E-09	1.735E-09	1.482E-09
NW	3.320E-08	1.880E-08	1.257E-08	7.146E-09	4.785E-09	3.500E-09	2.705E-09	2.172E-09	1.793E-09	1.511E-09	1.295E-09
NNW	1.593E-08	8.962E-09	5.966E-09	3.366E-09	2.243E-09	1.635E-09	1.261E-09	1.010E-09	8.325E-10	7.010E-10	6.004E-10
N	3.996E-08	2.282E-08	1.533E-08	8.739E-09	5.849E-09	4.270E-09	3.292E-09	2.635E-09	2.168E-09	1.821E-09	1.555E-09
NNE	6.367E-08	3.623E-08	2.430E-08	1.384E-08	9.267E-09	6.772E-09	5.227E-09	4.190E-09	3.452E-09	2.904E-09	2.484E-09
NE	1.481E-07	8.465E-08	5.626E-08	3.195E-08	2.137E-08	1.562E-08	1.206E-08	9.682E-09	7.991E-09	6.738E-09	5.777E-09
ENE	1.576E-07	9.070E-08	6.122E-08	3.505E-08	2.351E-08	1.718E-08	1.326E-08	1.063E-08	8.758E-09	7.369E-09	6.304E-09
E	1.220E-07	7.044E-08	4.758E-08	2.718E-08	1.815E-08	1.319E-08	1.013E-08	8.069E-09	6.609E-09	5.529E-09	4.703E-09
ESE	1.240E-07	7.164E-08	4.842E-08	2.771E-08	1.853E-08	1.350E-08	1.038E-08	8.285E-09	6.798E-09	5.697E-09	4.855E-09
SE	1.868E-07	1.092E-07	7.436E-08	4.297E-08	2.892E-08	2.116E-08	1.632E-08	1.305E-08	1.073E-08	9.003E-09	7.679E-09
SSE	1.625E-07	9.557E-08	6.535E-08	3.799E-08	2.568E-08	1.885E-08	1.458E-08	1.169E-08	9.628E-09	8.094E-09	6.915E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.016E-06	7.022E-07	3.447E-07	2.199E-07	1.572E-07	8.055E-08	3.132E-08	1.506E-08	9.169E-09	6.264E-09
SSW	1.864E-06	6.400E-07	3.122E-07	1.973E-07	1.402E-07	7.120E-08	2.742E-08	1.315E-08	8.021E-09	5.495E-09
SW	1.369E-06	4.961E-07	2.346E-07	1.446E-07	1.008E-07	4.968E-08	1.834E-08	8.547E-09	5.139E-09	3.488E-09
WSW	8.830E-07	3.187E-07	1.516E-07	9.396E-08	6.587E-08	3.287E-08	1.247E-08	5.984E-09	3.679E-09	2.542E-09
W	4.595E-07	1.616E-07	7.571E-08	4.680E-08	3.278E-08	1.641E-08	6.275E-09	3.038E-09	1.879E-09	1.304E-09
WNW	5.695E-07	2.053E-07	9.678E-08	6.168E-08	4.348E-08	2.191E-08	8.425E-09	4.078E-09	2.515E-09	1.739E-09
NW	5.265E-07	1.895E-07	8.946E-08	5.521E-08	3.862E-08	1.923E-08	7.301E-09	3.525E-09	2.180E-09	1.515E-09
NNW	2.546E-07	9.240E-08	4.334E-08	2.663E-08	1.856E-08	9.179E-09	3.445E-09	1.647E-09	1.014E-09	7.027E-10
N	6.037E-07	2.191E-07	1.054E-07	6.578E-08	4.634E-08	2.330E-08	8.920E-09	4.300E-09	2.645E-09	1.826E-09
NNE	1.004E-06	3.577E-07	1.697E-07	1.053E-07	7.394E-08	3.703E-08	1.413E-08	6.819E-09	4.205E-09	2.911E-09
NE	2.304E-06	8.352E-07	3.969E-07	2.457E-07	1.722E-07	8.594E-08	3.265E-08	1.573E-08	9.718E-09	6.753E-09
ENE	2.301E-06	8.351E-07	4.075E-07	2.569E-07	1.822E-	9.246E-08	3.574E-08	1.730E-08	1.067E-08	7.387 09
E	1.781E-06	6.361E-07	3.119E-07	1.978E-07	1.409E-	7.173E-08	2.770E-08	1.329E-08	8.100E-09	5.54 09

ESE	1.863E-06	6.525E-07	3.175E-07	2.012E-07	1.432E-07	7.295E-08	2.823E-08	1.559E-08	8.317E-09	5.711E-09
SE	2.753E-06	9.518E-07	4.681E-07	2.999E-07	2.151E-07	1.110E-07	4.370E-08	2.129E-08	1.310E-08	9.024E-09
SSE	2.362E-06	8.160E-07	4.031E-07	2.595E-07	1.868E-07	9.702E-08	3.860E-08	1.896E-08	1.173E-08	8.112E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	0.0
DIAMETER	(METERS)	0.0
EXIT VELOCITY	(METERS)	0.0

REF. WIND HEIGHT	(METERS)	10.0
BUILDING HEIGHT	(METERS)	56.9
BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	2120.0
HEAT EMISSION RATE	(CAL/SEC)	0.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)			
ELEVATED	LESS THAN	0.0		
MIXED	BETWEEN	0.0	AND	0.0
GROUND LEVEL	ABOVE	0.0		

AT THE MEASURED WIND HEIGHT (11.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC)				WIND SPEED (METERS/SEC)			
	STABLE CONDITIONS				UNSTABLE/NEUTRAL CONDITIONS			
ELEVATED	LESS THAN	0.0			LESS THAN	0.0		
MIXED	BETWEEN	0.0	AND	0.0	BETWEEN	0.0	AND	0.0
GROUND LEVEL	ABOVE	0.0			ABOVE	0.0		

EXIT ONE- GROUND LEVEL RELEASE-- 1/1/80-6/30/80

0.000 DAY DECAY, DEPLETED

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	1.175E-05	3.458E-06	1.697E-06	1.080E-06	5.783E-07	3.861E-07	2.820E-07	2.178E-07	1.749E-07	1.446E-07	1.221E-07
SSW	1.023E-05	3.050E-06	1.526E-06	9.817E-07	5.302E-07	3.512E-07	2.549E-07	1.958E-07	1.566E-07	1.289E-07	1.086E-07
SW	7.159E-06	2.241E-06	1.179E-06	7.647E-07	4.131E-07	2.678E-07	1.911E-07	1.448E-07	1.145E-07	9.332E-08	7.789E-08
WSW	4.681E-06	1.455E-06	7.543E-07	4.885E-07	2.641E-07	1.716E-07	1.226E-07	9.309E-08	7.369E-08	6.016E-08	5.028E-08
W	2.495E-06	7.674E-07	3.922E-07	2.498E-07	1.326E-07	8.583E-08	6.120E-08	4.640E-08	3.670E-08	2.994E-08	2.502E-08
WNW	3.152E-06	9.506E-07	4.821E-07	3.132E-07	1.703E-07	1.114E-07	8.000E-08	6.098E-08	4.845E-08	3.967E-08	3.325E-08
NW	2.806E-06	8.632E-07	4.521E-07	2.918E-07	1.569E-07	1.015E-07	7.226E-08	5.474E-08	4.326E-08	3.526E-08	2.944E-08
NNW	1.294E-06	4.092E-07	2.216E-07	1.428E-07	7.640E-08	4.924E-08	3.497E-08	2.642E-08	2.083E-08	1.695E-08	1.412E-08
N	3.271E-06	1.001E-06	5.124E-07	3.340E-07	1.818E-07	1.189E-07	8.536E-08	6.504E-08	5.165E-08	4.228E-08	3.542E-08
NNE	5.365E-06	1.662E-06	8.589E-07	5.517E-07	2.953E-07	1.919E-07	1.373E-07	1.043E-07	8.261E-08	6.749E-08	5.645E-08
NE	1.223E-05	3.776E-06	1.976E-06	1.282E-06	6.926E-07	4.496E-07	3.211E-07	2.436E-07	1.928E-07	1.573E-07	1.315E-07
ENE	1.284E-05	3.841E-06	1.949E-06	1.270E-06	6.936E-07	4.582E-07	3.316E-07	2.543E-07	2.029E-07	1.666E-07	1.403E-07
E	1.016E-05	3.009E-06	1.505E-06	9.715E-07	5.271E-07	3.503E-07	2.548E-07	1.962E-07	1.571E-07	1.295E-07	1.092E-07
ESE	1.060E-05	3.160E-06	1.580E-06	1.007E-06	5.383E-07	3.572E-07	2.596E-07	1.998E-07	1.600E-07	1.319E-07	1.112E-07
SE	1.621E-05	4.729E-06	2.324E-06	1.469E-06	7.814E-07	5.231E-07	3.829E-07	2.964E-07	2.384E-07	1.973E-07	1.669E-07
SSE	1.426E-05	4.124E-06	2.002E-06	1.259E-06	6.680E-07	4.489E-07	3.296E-07	2.557E-07	2.062E-07	1.710E-07	1.448E-07

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.050E-07	5.861E-08	3.846E-08	2.104E-08	1.360E-08	9.626E-09	7.221E-09	5.637E-09	4.533E-09	3.727E-09	3.120E-09
SSW	9.306E-08	5.194E-08	3.353E-08	1.818E-08	1.169E-08	8.247E-09	6.171E-09	4.809E-09	3.862E-09	3.173E-09	2.655E-09
SW	6.625E-08	3.558E-08	2.273E-08	1.200E-08	7.576E-09	5.273E-09	3.904E-09	3.017E-09	2.405E-09	1.964E-09	1.635E-09
WSW	4.282E-08	2.313E-08	1.485E-08	7.906E-09	5.030E-09	3.525E-09	2.626E-09	2.041E-09	1.636E-09	1.343E-09	1.124E-09
W	2.131E-08	1.155E-08	7.442E-09	3.984E-09	2.546E-09	1.791E-09	1.339E-09	1.043E-09	8.386E-10	6.900E-10	5.784E-10
WNW	2.839E-08	1.549E-08	1.001E-08	5.381E-09	3.445E-09	2.425E-09	1.813E-09	1.414E-09	1.136E-09	9.343E-10	7.827E-10
NW	2.505E-08	1.350E-08	8.656E-09	4.607E-09	2.936E-09	2.060E-09	1.537E-09	1.196E-09	9.597E-10	7.886E-10	6.602E-10
NNW	1.200E-08	6.410E-09	4.092E-09	2.160E-09	1.367E-09	9.540E-10	7.086E-10	5.494E-10	4.396E-10	3.603E-10	3.010E-10
N	3.022E-08	1.645E-08	1.061E-08	5.687E-09	3.631E-09	2.551E-09	1.904E-09	1.482E-09	1.190E-09	9.775E-10	8.182E-10
NNE	4.811E-08	2.608E-08	1.679E-08	8.980E-09	5.732E-09	4.028E-09	3.008E-09	2.342E-09	1.881E-09	1.546E-09	1.295E-09
NE	1.120E-07	6.050E-08	3.885E-08	2.069E-08	1.317E-08	9.229E-09	6.878E-09	5.366E-09	4.287E-09	3.520E-09	2.945E-09
ENE	1.201E-07	6.607E-08	4.294E-08	2.321E-08	1.489E-08	1.050E-08	7.856E-09	6.126E-09	4.923E-09	4.049E-09	3.392E-09
E	9.364E-08	5.190E-08	3.388E-08	1.841E-08	1.185E-08	8.360E-09	6.258E-09	4.878E-09	3.918E-09	3.219E-09	2.694E-09
ESE	9.537E-08	5.291E-08	3.458E-08	1.882E-08	1.213E-08	8.575E-09	6.427E-09	5.034E-09	4.046E-09	3.326E-09	2.779E-09
SE	1.437E-07	8.063E-08	5.311E-08	2.922E-08	1.897E-08	1.348E-08	1.015E-08	7.948E-09	6.408E-09	5.284E-09	4.435E-09
SSE	1.248E-07	7.044E-08	4.658E-08	2.577E-08	1.679E-08	1.197E-08	9.029E-09	7.085E-09	5.722E-09	4.725E-09	3.971E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	1.814E-06	6.044E-07	2.841E-07	1.756E-07	1.224E-07	5.996E-08	2.161E-08	9.723E-09	5.669E-09	3.741E-09
SSW	1.623E-06	5.510E-07	2.570E-07	1.573E-07	1.089E-07	5.273E-08	1.871E-08	8.334E-09	4.857E-09	3.185E-09
SW	1.231E-06	4.267E-07	1.930E-07	1.151E-07	7.815E-08	3.669E-08	1.242E-08	5.340E-09	3.037E-09	1.973E-09
WSW	7.922E-07	2.730E-07	1.239E-07	7.406E-08	5.045E-08	2.363E-08	8.171E-09	3.567E-09	2.054E-09	1.349E-09
W	4.123E-07	1.379E-07	6.185E-08	3.689E-08	2.510E-08	1.190E-08	4.113E-09	1.811E-09	1.056E-09	6.927E-10
WNW	5.112E-07	1.759E-07	8.076E-08	4.869E-08	3.335E-08	1.592E-08	5.550E-09	2.452E-09	1.422E-09	9.379E-10
NW	4.722E-07	1.622E-07	7.305E-08	4.349E-08	2.954E-08	1.391E-08	4.764E-09	2.084E-09	1.203E-09	7.917E-10
NNW	2.283E-07	7.908E-08	3.535E-08	2.095E-08	1.417E-08	6.623E-09	2.237E-09	9.659E-10	5.531E-10	3.618E-10
N	5.417E-07	1.877E-07	8.617E-08	5.151E-08	3.552E-08	1.692E-08	5.866E-09	2.581E-09	1.492E-09	9.814E-10
NNE	9.007E-07	3.063E-07	1.386E-07	8.304E-08	5.663E-08	2.685E-08	9.273E-09	4.074E-09	2.356E-09	1.552E-09
NE	2.086E-06	7.155E-07	3.243E-07	1.938E-07	1.319E-07	6.232E-08	2.158E-08	9.339E-09	5.386E-09	3.534E-09
ENE	2.068E-06	7.170E-07	3.344E-07	2.039E-07	1.407E-07	6.779E-08	2.396E-08	1.061E-08	6.162E-09	4.06[illegible]-09
E	1.602E-06	5.473E-07	2.568E-07	1.578E-07	1.094E-	5.317E-08	1.893E-08	8.449E-09	4.906E-09	3.23 09

SE	2.478E-06	8.193E-07	3.657E-07	2.393E-07	1.673E-07	8.240E-08	2.998E-08	1.361E-08	7.996E-09	5.302E-09
SSE	2.143E-06	7.020E-07	3.319E-07	2.069E-07	1.452E-07	7.192E-08	2.646E-08	1.208E-08	7.121E-09	4.741E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	0.0	REF. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	0.0	BUILDING HEIGHT	(METERS)	56.9
EXIT VELOCITY	(METERS)	0.0	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	2120.0
			HEAT EMISSION RATE	(CAL/SEC)	0.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)			
ELEVATED	LESS THAN	0.0		
MIXED	BETWEEN	0.0	AND	0.0
GROUND LEVEL	ABOVE	0.0		

AT THE MEASURED WIND HEIGHT (11.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC)				WIND SPEED (METERS/SEC)			
	STABLE CONDITIONS				UNSTABLE/NEUTRAL CONDITIONS			
ELEVATED	LESS THAN	0.0			LESS THAN	0.0		
MIXED	BETWEEN	0.0	AND	0.0	BETWEEN	0.0	AND	0.0
GROUND LEVEL	ABOVE	0.0			ABOVE	0.0		

EXIT ONE- GROUND LEVEL RELEASE-- 1/1/60-6/30/80

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	DISTANCES IN MILES 0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	3.524E-08	1.192E-08	6.119E-09	3.757E-09	1.873E-09	1.136E-09	7.681E-10	5.566E-10	4.232E-10	3.334E-10	2.699E-10
SSW	3.632E-08	1.226E-08	6.307E-09	3.873E-09	1.931E-09	1.171E-09	7.917E-10	5.737E-10	4.362E-10	3.437E-10	2.782E-10
SW	3.983E-08	1.347E-08	6.916E-09	4.247E-09	2.117E-09	1.284E-09	8.682E-10	6.291E-10	4.784E-10	3.769E-10	3.051E-10
WSW	3.092E-08	1.046E-08	5.369E-09	3.297E-09	1.644E-09	9.968E-10	6.739E-10	4.884E-10	3.713E-10	2.926E-10	2.368E-10
W	1.863E-08	6.301E-09	3.235E-09	1.987E-09	9.904E-10	6.007E-10	4.061E-10	2.943E-10	2.238E-10	1.763E-10	1.427E-10
WNW	1.742E-08	5.896E-09	3.026E-09	1.857E-09	9.258E-10	5.615E-10	3.796E-10	2.751E-10	2.092E-10	1.648E-10	1.334E-10
NW	1.896E-08	6.393E-09	3.282E-09	2.015E-09	1.005E-09	6.094E-10	4.120E-10	2.986E-10	2.270E-10	1.789E-10	1.448E-10
NNW	1.026E-08	3.470E-09	1.782E-09	1.094E-09	5.455E-10	3.308E-10	2.237E-10	1.621E-10	1.232E-10	9.709E-11	7.860E-11
N	2.166E-08	7.306E-09	3.751E-09	2.303E-09	1.148E-09	6.965E-10	4.709E-10	3.412E-10	2.595E-10	2.044E-10	1.655E-10
NNE	4.348E-08	1.470E-08	7.549E-09	4.636E-09	2.311E-09	1.402E-09	9.477E-10	6.867E-10	5.222E-10	4.114E-10	3.330E-10
NE	1.078E-07	3.644E-08	1.871E-08	1.149E-08	5.727E-09	3.474E-09	2.349E-09	1.702E-09	1.294E-09	1.019E-09	8.253E-10
ENE	5.368E-08	1.822E-08	9.354E-09	5.744E-09	2.864E-09	1.737E-09	1.174E-09	8.509E-10	6.470E-10	5.097E-10	4.127E-10
E	2.741E-08	9.269E-09	4.759E-09	2.922E-09	1.457E-09	8.836E-10	5.974E-10	4.329E-10	3.292E-10	2.593E-10	2.100E-10
ESE	3.146E-08	1.064E-08	5.463E-09	3.354E-09	1.672E-09	1.014E-09	6.857E-10	4.969E-10	3.778E-10	2.977E-10	2.410E-10
SE	4.632E-08	1.566E-08	8.042E-09	4.938E-09	2.462E-09	1.493E-09	1.009E-09	7.315E-10	5.562E-10	4.382E-10	3.547E-10
SSE	3.956E-08	1.338E-08	6.869E-09	4.218E-09	2.103E-09	1.275E-09	8.623E-10	6.249E-10	4.751E-10	3.743E-10	3.030E-10

DIRECTION FROM SITE	DISTANCES IN MILES 5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	2.233E-10	1.094E-10	6.866E-11	3.470E-11	2.100E-11	1.408E-11	1.009E-11	7.577E-12	5.892E-12	4.706E-12	3.841E-12
SSW	2.301E-10	1.128E-10	7.076E-11	3.577E-11	2.165E-11	1.451E-11	1.040E-11	7.810E-12	6.072E-12	4.850E-12	3.959E-12
SW	2.524E-10	1.237E-10	7.760E-11	3.922E-11	2.374E-11	1.592E-11	1.141E-11	8.564E-12	6.659E-12	5.319E-12	4.342E-12
WSW	1.959E-10	9.601E-11	6.024E-11	3.045E-11	1.843E-11	1.236E-11	8.854E-12	6.648E-12	5.169E-12	4.129E-12	3.370E-12
W	1.181E-10	5.786E-11	3.630E-11	1.835E-11	1.111E-11	7.446E-12	5.335E-12	4.006E-12	3.115E-12	2.488E-12	2.031E-12
WNW	1.104E-10	5.408E-11	3.393E-11	1.715E-11	1.038E-11	6.960E-12	4.988E-12	3.745E-12	2.912E-12	2.326E-12	1.899E-12
NW	1.198E-10	5.870E-11	3.683E-11	1.861E-11	1.127E-11	7.554E-12	5.413E-12	4.064E-12	3.160E-12	2.524E-12	2.060E-12
NNW	6.502E-11	3.186E-11	1.999E-11	1.011E-11	6.116E-12	4.101E-12	2.938E-12	2.206E-12	1.716E-12	1.370E-12	1.119E-12
N	1.369E-10	6.708E-11	4.209E-11	2.127E-11	1.288E-11	8.633E-12	6.186E-12	4.645E-12	3.612E-12	2.885E-12	2.355E-12
NNE	2.755E-10	1.350E-10	8.470E-11	4.281E-11	2.591E-11	1.737E-11	1.245E-11	9.348E-12	7.268E-12	5.806E-12	4.739E-12
NE	6.827E-10	3.346E-10	2.099E-10	1.061E-10	6.422E-11	4.306E-11	3.085E-11	2.317E-11	1.801E-11	1.439E-11	1.174E-11
ENE	3.414E-10	1.673E-10	1.050E-10	5.305E-11	3.211E-11	2.153E-11	1.543E-11	1.158E-11	9.007E-12	7.195E-12	5.872E-12
E	1.737E-10	8.511E-11	5.340E-11	2.699E-11	1.634E-11	1.095E-11	7.849E-12	5.893E-12	4.582E-12	3.660E-12	2.986E-12
ESE	1.993E-10	9.769E-11	6.129E-11	3.098E-11	1.875E-11	1.257E-11	9.008E-12	6.764E-12	5.259E-12	4.201E-12	3.429E-12
SE	2.934E-10	1.438E-10	9.023E-11	4.561E-11	2.760E-11	1.851E-11	1.326E-11	9.958E-12	7.743E-12	6.185E-12	5.048E-12
SSE	2.507E-10	1.228E-10	7.708E-11	3.895E-11	2.356E-11	1.581E-11	1.133E-11	8.506E-12	6.614E-12	5.283E-12	4.312E-12

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES .5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	6.356E-09	1.964E-09	7.616E-10	4.271E-10	2.715E-10	1.166E-10	3.616E-11	1.433E-11	7.653E-12	4.737E-12
SSW	6.553E-09	2.025E-09	8.056E-10	4.402E-10	2.798E-10	1.202E-10	3.727E-11	1.477E-11	7.888E-12	4.882E-12
SW	7.186E-09	2.220E-09	8.835E-10	4.828E-10	3.068E-10	1.318E-10	4.087E-11	1.620E-11	8.650E-12	5.354E-12
WSW	5.578E-09	1.723E-09	6.858E-10	3.748E-10	2.382E-10	1.023E-10	3.173E-11	1.257E-11	6.715E-12	4.156E-12
W	3.362E-09	1.039E-09	4.133E-10	2.258E-10	1.435E-10	6.166E-11	1.912E-11	7.576E-12	4.047E-12	2.505E-12
WNW	3.142E-09	9.709E-10	3.863E-10	2.111E-10	1.342E-10	5.763E-11	1.787E-11	7.084E-12	3.783E-12	2.341E-12
NW	3.410E-09	1.054E-09	4.193E-10	2.291E-10	1.456E-10	6.255E-11	1.940E-11	7.688E-12	4.105E-12	2.541E-12
NNW	1.851E-09	5.720E-10	2.276E-10	1.244E-10	7.905E-11	3.396E-11	1.053E-11	4.173E-12	2.229E-12	1.379E-12
N	3.898E-09	1.204E-09	4.792E-10	2.618E-10	1.664E-10	7.149E-11	2.217E-11	8.786E-12	4.692E-12	2.904E-12
NNE	7.894E-09	2.423E-09	9.595E-10	5.270E-10	3.349E-10	1.439E-10	4.461E-11	1.768E-11	9.442E-12	5.844E-12
NE	1.994E-08	6.006E-09	2.390E-09	1.306E-09	8.300E-10	3.565E-10	1.106E-10	4.382E-11	2.340E-11	1.448E-11
ENE	9.720E-09	3.003E-09	1.195E-09	6.530E-10	4.150E-10	1.783E-10	5.528E-11	2.191E-11	1.170E-11	7.242E-12
E	4.945E-09	1.528E-09	6.079E-10	3.322E-10	2.111E-10	9.070E-11	2.812E-11	1.115E-11	5.953E-12	3.684E-12
ESE	5.676E-09	1.754E-09	6.978E-10	3.813E-10	2.424E-10	1.041E-10	3.228E-11	1.279E-11	6.832E-12	4.229E-12
SE	8.355E-09	2.581E-09	1.027E-09	5.613E-10	3.568E-10	1.532E-10	4.752E-11	1.883E-11	1.006E-11	6.225E-12
SSE	7.137E-09	2.205E-09	8.775E-10	4.795E-10	3.048E-10	1.309E-10	4.059E-11	1.609E-11	8.592E-12	5.318E-12

RELEASE HEIGHT	(METERS)	0.0	REF. WIND HEIGHT	(METERS)	10.0
DIAMETER	(METERS)	0.0	BUILDING HEIGHT	(METERS)	56.9
EXIT VELOCITY	(METERS)	0.0	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	2120.0
			HEAT EMISSION RATE	(CAL/SEC)	0.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)			
ELEVATED	LESS THAN	0.0		
MIXED	BETWEEN	0.0	AND	0.0
GROUND LEVEL	ABOVE	0.0		

AT THE MEASURED WIND HEIGHT (11.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS				WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS			
ELEVATED	LESS THAN	0.0			LESS THAN	0.0		
MIXED	BETWEEN	0.0	AND	0.0	BETWEEN	0.0	AND	0.0
GROUND LEVEL	ABOVE	0.0			ABOVE	0.0		

EXIT ONE- GROUND LEVEL RELEASE-- 1/1/80-6/30/80

SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE (MILES)	DISTANCE (METERS)	X/Q (SEC/CUB.METER) NO DECAY UNDEPLETED	X/Q (SEC/CUB.METER) 2.260 DAY DECAY UNDEPLETED	X/Q (SEC/CUB.METER) 8.000 DAY DECAY DEPLETED	D/Q (PER SQ.METER)
A	SITE BOUNDARY	S	1.04	1674.	1.2E-06	1.2E-06	1.0E-06	3.5E-09
A	SITE BOUNDARY	SSW	0.96	1545.	1.2E-06	1.2E-06	1.0E-06	4.2E-09
A	SITE BOUNDARY	SW	0.89	1432.	1.0E-06	1.0E-06	9.1E-07	5.2E-09
A	SITE BOUNDARY	WSW	0.74	1191.	8.6E-07	8.6E-07	7.7E-07	5.5E-09
A	SITE BOUNDARY	W	0.69	1110.	5.0E-07	5.0E-07	4.5E-07	3.7E-09
A	SITE BOUNDARY	WNW	0.64	1030.	7.0E-07	7.0E-07	6.3E-07	3.9E-09
A	SITE BOUNDARY	NW	0.70	1127.	5.6E-07	5.6E-07	5.0E-07	3.7E-09
A	SITE BOUNDARY	NNW	0.64	1030.	3.1E-07	3.1E-07	2.8E-07	2.3E-09
A	SITE BOUNDARY	N	0.64	1030.	7.4E-07	7.4E-07	6.6E-07	4.9E-09
A	SITE BOUNDARY	NNE	0.64	1030.	1.2E-06	1.2E-06	1.1E-06	9.9E-09
A	SITE BOUNDARY	NE	0.91	1465.	1.7E-06	1.7E-06	1.5E-06	1.3E-08
A	SITE BOUNDARY	ENE	0.67	1078.	2.6E-06	2.6E-06	2.3E-06	1.1E-08
A	SITE BOUNDARY	E	0.68	1094.	2.0E-06	2.0E-06	1.8E-06	5.6E-09
A	SITE BOUNDARY	ESE	0.68	1094.	2.1E-06	2.1E-06	1.9E-06	6.4E-09
A	SITE BOUNDARY	SE	0.67	1078.	3.1E-06	3.1E-06	2.8E-06	9.7E-09
A	SITE BOUNDARY	SSE	0.74	1191.	2.3E-06	2.3E-06	2.0E-06	7.0E-09
A	MILK COW	SSE	0.79	1271.	2.1E-06	2.1E-06	1.8E-06	6.3E-09
A	MEAT ANIMAL	SW	1.70	2736.	4.1E-07	4.0E-07	3.4E-07	1.7E-09
A	MEAT ANIMAL	W	1.08	1738.	2.5E-07	2.5E-07	2.2E-07	1.7E-09
A	MEAT ANIMAL	WNW	1.10	1770.	5.5E-07	5.5E-07	4.8E-07	3.9E-09
A	MEAT ANIMAL	SE	0.79	1271.	2.4E-06	2.4E-06	2.1E-06	7.9E-09
A	MEAT ANIMAL	SSE	0.80	1287.	2.0E-06	2.0E-06	1.8E-06	6.2E-09
A	RESIDENCE	S	1.48	2382.	7.0E-07	6.9E-07	5.9E-07	1.9E-09
A	RESIDENCE	SSW	1.44	2317.	6.6E-07	6.6E-07	5.6E-07	2.1E-09
A	RESIDENCE	SW	0.89	1432.	1.0E-06	1.0E-06	9.1E-07	5.2E-09
A	RESIDENCE	WSW	1.00	1609.	5.6E-07	5.6E-07	4.9E-07	3.3E-09
A	RESIDENCE	W	0.87	1400.	3.5E-07	3.5E-07	3.1E-07	2.5E-09
A	RESIDENCE	WNW	0.79	1271.	5.0E-07	5.0E-07	4.5E-07	2.8E-09
A	RESIDENCE	NW	0.80	1287.	4.6E-07	4.6E-07	4.1E-07	2.9E-09
A	RESIDENCE	NNW	0.85	1368.	2.1E-07	2.1E-07	1.8E-07	1.4E-09
A	RESIDENCE	N	0.88	1416.	4.6E-07	4.6E-07	4.0E-07	2.9E-09
A	RESIDENCE	NNE	0.91	1465.	7.2E-07	7.2E-07	6.4E-07	5.4E-09
A	RESIDENCE	NE	2.24	3605.	4.6E-07	4.6E-07	3.8E-07	2.8E-09
A	RESIDENCE	E	0.94	1513.	1.2E-06	1.2E-06	1.1E-06	3.2E-09
A	RESIDENCE	SE	0.82	1320.	2.3E-06	2.3E-06	2.0E-06	6.9E-09
A	RESIDENCE	SSE	0.79	1271.	2.1E-06	2.1E-06	1.8E-06	6.3E-09
A	GARDEN	S	1.57	2527.	6.4E-07	6.3E-07	5.4E-07	1.7E-09
A	GARDEN	SSW	1.44	2317.	6.6E-07	6.6E-07	5.6E-07	2.1E-09
A	GARDEN	SW	1.04	1674.	8.3E-07	8.2E-07	7.2E-07	4.0E-09
A	GARDEN	WSW	1.00	1609.	5.6E-07	5.6E-07	4.9E-07	3.3E-09
A	GARDEN	W	0.87	1400.	3.5E-07	3.5E-07	3.1E-07	2.5E-09
A	GARDEN	WNW	0.81	1304.	4.8E-07	4.8E-07	4.3E-07	2.7E-09
A	GARDEN	NW	5.00	8047.	3.4E-08	3.3E-08	2.5E-08	1.2E-10
A	GARDEN	NNW	0.97	1561.	1.7E-07	1.7E-07	1.5E-07	1.2E-09
A	GARDEN	N	0.85	1368.	4.8E-07	4.8E-07	4.3E-07	3.0E-09
A	GARDEN	NNE	1.39	2237.	3.9E-07	3.9E-07	3.3E-07	2.6E-09
A	GARDEN	SE	0.94	1513.	1.8E-06	1.8E-06	1.6E-06	5.2E-09

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	0.0
DIAMETER	(METERS)	0.0
EXIT VELOCITY	(METERS)	0.0
REF. WIND HEIGHT	(METERS)	10.0
BUILDING HEIGHT	(METERS)	56.9
BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	2120.0
HEAT EMISSION RATE	(CAL/SEC)	0.0

VENT RELEASE MODE	WIND SPEED (METERS/SEC)				VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS				WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS			
ELEVATED	LESS THAN	0.0			ELEVATED	LESS THAN	0.0			LESS THAN	0.0		
MIXED	BETWEEN	0.0	AND	0.0	MIXED	BETWEEN	0.0	AND	0.0	BETWEEN	0.0	AND	0.0
GROUND LEVEL	ABOVE	0.0			GROUND LEVEL	ABOVE	0.0			ABOVE	0.0		

ENCLOSURE 4

DIFFUSION ANALYSIS
ELEVATED RELEASE
JANUARY 1 - JUNE 30, 1980
BRUNSWICK STEAM ELECTRIC PLANT

Description of Attachments

The attached tables provide estimates of relative elevated-release concentration (X/Q) and deposition (D/Q) for the period January 1 through June 30, 1980 for an elevated release.

A description of the tables is as follows:

Table 1 - Undecayed, undepleted X/Q for standard distances.
Table 2 - 2.26-day decay, undepleted X/Q for standard distances.
Table 3 - 8.0-day decay, depleted X/Q for standard distances.
Table 4 - Deposition estimates for standard distances.
Table 5 - X/Q and D/Q estimates for site boundary locations and special points of interest.

Method of Calculation

The elevated release calculations represent sector averaged concentrations at the given distances from the center of the reactor buildings. The computer code used (XOQDOQ) was received from the U. S. Nuclear Regulatory Commission (NRC), Hydrology Meteorology Branch. (1)

Input variables included:

1. Elevation-distance relationships from the December 1978 site survey.
2. Joint wind frequency from the 100 meter level on-site meteorological tower.
3. Sigma Z limited to 1000 meters.
4. Calm winds included with joint frequency and distributed according to the occurrence in the lowest non-calm speed class.

The adjustment factors to account for the straingt-line flow model limitations (RG 1.111, Section C.1.c) were not applied. The code was modified to incorporate the revised curves for estimating plume depletion and ground deposition (XOQDOQ - ERRATA, November 8, 1976).

Relative Concentration Estimates

The site boundary distances used for the calculations are as prepared for the June 4, 1976, Appendix I submittal to the NRC. Special point distances were obtained from the December 1978 site survey.

The maximum undepleted, undecayed X/Q value at the site boundary is 4.8E-08 in the NE sector. Site boundary maximums for previous six-month periods are as follows:

JUL - DEC 1978	3.0E-08	NE, SW Sectors
JAN - JUN 1979	3.4E-08	NE Sector
JUL - DEC 1979	2.9E-08	NE Sector

The maximum elevated release X/Q value occurs within the site boundary and is approximately 5.8E-08 at a point 0.5 mile NE of the plant center.

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(1) Program for the Meteorological Evaluation of Routine Effluent Release at Nuclear Power Stations, J. F. Sagendorf and J. T. Goll, August 29, 1976.

PRINTOUT OF INPUT CARDS

```
    1   1G01G0000G.GOGGGGGGGGGGGGGGGGGGGGGGG1101GGGGGGGGGGGG1101GGGGGGGGGGGGGGGGGGGG
    2   XQNDOQ - BRUNSWICK ELEVATED RELEASE 1/1/80-6/30/80
    3     7    7   10 4175    5    5    1
    4   104.00 101.00   2.26  -8.00
    5     0.0      0.0      0.0      0.0      0.0      0.0      0.0
    6     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
    6     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
    6     0.0    0.0    0.0    0.0    1.000  1.000  2.000  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
    6     0.0    1.000  2.000  1.000  5.000 11.000  4.000  3.000  2.000  0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
    6     2.000  3.000  4.000 10.000 35.000  7.000  1.000  0.0    1.000 10.000 14.000  2.000  0.0    0.0    4.000  0.0
    6     0.0    0.0    2.000  4.000  0.0    0.0    2.000  1.000  0.0    2.000  9.000  1.000  0.0    3.000  3.000  1.000
    6     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    4.000  2.000  0.0    0.0    3.000  1.000
    6     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
    6     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
    6   1.000    0.0    1.000  0.0    2.000  0.0    1.000  0.0    0.0    0.0    0.0    0.0    0.0    1.000  2.000  1.000
    6   2.000  3.000  2.000  3.000 10.000 12.000  4.000  2.000  8.000  4.000  5.000  5.000  0.0    0.0    2.000  7.000
    6   3.000  4.000  4.000  7.000  7.000  3.000  2.000  1.000  2.000 20.000 35.000  4.000  0.0    1.000  7.000  8.000
    6     0.0    0.0    1.000  3.000  0.0    0.0    1.000  0.0    1.000  9.000 25.000  3.000  0.0    7.000  3.000  4.000
    6     0.0    0.0    3.000  0.0    0.0    0.0    0.0    0.0    0.0    0.0   15.000  2.000  0.0    1.000  2.000  1.000
    6     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
    6     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
    6   2.000    0.0    1.000  2.000  2.000  2.000  3.000  3.000  1.000  0.0    0.0    2.000  0.0    0.0    3.000  5.000
    6   4.000  5.000  3.000  7.000  5.000  7.000  7.000  3.000  2.000 13.000 11.000  6.000  1.000  3.000 11.000 14.000
    6   3.000 11.000  8.000  8.000  5.000  1.000  4.000  0.0    4.000 13.000 23.000  7.000  2.000  6.000  5.000 14.000
    6   2.000    0.0    4.000  4.000  0.0    0.0    1.000  0.0    4.000 14.000 16.000  7.000  0.0    6.000  7.000  0.0
    6     0.0    0.0    1.000  0.0    0.0    0.0    0.0    0.0    0.0    0.0    8.000  2.000  0.0    1.000  3.000  0.0
    6     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
    6     0.0    0.0    2.000  0.0    0.0    0.0    0.0    0.0    1.000  0.0    0.0    0.0    1.000  0.0    0.0    1.000
    6   5.000  6.000  6.000  9.000  3.000  5.000  5.000  2.000  3.000  2.000  4.000  8.000  9.000  7.000  4.000  7.000
    6  33.000 27.000  8.000 25.000 13.000 16.000  4.000  7.000 19.000 34.000 27.000 29.000 37.000 16.000 16.000 24.000
    6  41.000 61.000 50.000 36.000 29.000  8.000 13.000  4.000  6.000 43.000 52.000 42.000 11.000 24.000 45.000 43.000
    6  32.000 15.000 51.000 26.000  5.000 10.000  6.000  0.0    9.000 41.000103.000 39.000  1.000 13.000 15.000 17.000
    6   1.000    0.0   20.000  6.000  0.0    0.0    0.0    4.000 17.000 13.000 46.000 18.000  3.000 11.000  4.000  0.0
    6     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
    6   1.000    0.0    1.000  0.0    1.000  0.0    0.0    1.000  2.000  0.0    0.0    0.0    1.000  1.000  0.0    0.0
    6     0.0    1.000  1.000  2.000  2.000  0.0    1.000  2.000  3.000  4.000  4.000  2.000  6.000  1.000  1.000  2.000
    6   6.000  8.000  8.000  7.000 12.000 10.000  4.000  5.000  7.000 12.000 19.000 19.000 15.000  6.000  8.000 13.000
    6  20.000 36.000 37.000 25.000 38.000 15.000 18.000 11.000  8.000 46.000 60.000 58.000 20.000 11.000 31.000 29.000
    6  13.000 18.000 28.000 25.000  0.0    5.000 17.000 19.000 15.000 15.000104.000 57.000  6.000 16.000 17.000 25.000
    6     0.0    0.0    6.000  1.000  2.000  1.000  6.000 15.000 33.000 19.000 38.000 25.000  1.000  1.000  0.0    0.0
    6     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
    6   1.000    0.0    0.0    0.0    1.000  0.0    0.0    1.000  0.0    0.0    0.0    0.0    0.0    0.0    1.000  0.0
    6   1.000  1.000  2.000  2.000  3.000  1.000  1.000  3.000  1.000  2.000  0.0    2.000  6.000  1.000  1.000  0.0
    6   1.000  7.000  1.000 13.000  6.000  4.000  7.000 11.000  7.000 12.000  9.000 18.000 21.000  4.000  3.000  3.000
    6  11.000 17.000 31.000  9.000 14.000  2.000  7.000  6.000  5.000 10.000 17.000 24.000 24.000 13.000 10.000 11.000
    6   9.000 14.000 10.000  0.0    0.0    0.0    1.000  9.000  3.000  4.000  8.000 13.000  5.000  9.000 15.000 20.000
    6     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    2.000  2.000  0.0    3.000  0.0    0.0
    6     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    1.000  0.0    0.0
    6     0.0  2.000  1.000  1.000  1.000  0.0    0.0    0.0    0.0    0.0    1.000  1.000  2.000  2.000  2.000  0.0
    6   5.000  0.0    3.000  1.000  3.000  7.000  2.000  3.000  2.000  4.000  4.000  2.000  3.000  2.000  2.000  5.000
    .  10.000 12.000 16.000  9.000  9.000  3.000  5.000 12.000  3.000  6.000  3.000 12.000 10.000  2.000  3.000  6.000
    6  10.000  5.000  8.000  7.000  3.000  2.000  3.000  1.000  1.000  7.000  6.000  2.000  6.000 10.000  3.000  5.000
    o   4.000  1.000  2.000  0.0    0.0    0.0    0.0    0.0    0.0    1.000  3.000  0.0    3.000  7.000  5.000  4.000
    6     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    1.000  2.000  0.0    0.0
    7   200.   0.750  3.500  7.500 12.500 18.500 25.000 26.000  0.0    0.0    0.0    0.0    0.0    0.0    0.0
   10   402.   402.   402.   402.   402.   402.   402.   402.   402.   402.   402.   402.   402.   402.   402.   402.
   11     6.     6.     6.     6.     6.     6.     6.     6.     6.     6.     6.     6.     6.     6.     6.     6.
   10  1207.  1207.  1207.  1175.  1078.   966.   966.   982.   998.  1014.  1014.  1014.  1078.  1094.  1078.  1110.
   11     6.     6.     6.     6.     6.     6.     6.            6.     6.     6.     6.     6.     4.     6.     6
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```
11          6.    6.    6.    6.    6.    6.    8.    6.    6.    6.    6.    6.    6.    7.    6.    6.
10       2012.  2012.  1674.  1207.  1207.  1207.  1207.  1207.  1207.  1207.  1465.  1207.  1207.  1207.  1207.  1207.
11          6.    6.    6.    6.    6.    6.    6.    6.    6.    6.    6.    6.    6.    7.    6.    6.
10       2382.  2317.  2012.  1609.  1400.  1271.  1287.  1368.  1368.  1465.  2012.  2012.  1513.  2012.  1271.  1271.
11          6.    6.    6.    6.    6.    6.    8.    6.    6.    6.    6.    7.    7.    9.    6.    6.
10       2527.  2816.  2736.  2012.  1736.  1304.  2012.  1561.  1416.  1770.  2816.  2816.  2012.  2816.  1320.  1287.
11          6.    6.    6.    6.    6.    6.    9.    6.    6.    6.    6.    8.    7.   10.    6.    6.
10       2816.  3621.  2816.  2816.  2012.  2012.  2816.  2012.  2012.  2012.  3605.  3621.  2816.  3621.  1513.  2012.
11          6.    6.    6.    6.    6.    6.   10.    7.    6.    6.    6.    8.    8.   10.    6.    6.
10       3621.  4426.  3621.  3621.  2816.  2816.  3621.  2816.  2816.  2237.  3621.  4426.  3621.  4426.  2012.  2816.
11          6.    6.    6.    6.   11.    7.   10.    9.    6.    6.    6.    8.    8.   10.    6.    6.
10       4426.  5230.  4426.  4426.  3621.  3621.  4426.  3621.  3621.  2816.  4426.  5230.  4426.  5230.  2816.  3621.
11          6.    6.    6.    6.   12.   11.   12.   10.   10.    6.    6.    8.    8.   10.    6.    6.
10       5230.  6035.  5230.  5230.  4426.  4426.  5230.  4426.  4426.  3621.  5230.  6035.  5230.  6035.  3621.  4426.
11          6.    6.    6.    6.   12.   13.   12.   11.   10.    7.    9.    8.    8.   10.    6.    6.
12         16     1     5    14    11
13      SITE BOUNDARY
14          1 1.04     2 0.96     3 0.89     4 0.74     5 0.69     6 0.64     7 0.70     8 0.64
9 0.64    10 0.64    11 0.91    12 0.67    13 0.68    14 0.68    15 0.67    16 0.74
13      MILK COW
14         16 0.79
13      MEAT ANIMAL
14          3 1.70     5 1.08    10 1.10    15 0.79    16 0.80
13      RESIDENCE
14          1 1.48     2 1.44     3 0.89     4 1.00     5 0.87     6 0.79     7 0.80     8 0.85
9 0.88    10 0.91    11 2.24    13 0.94    15 0.82    16 0.79
13      GARDEN
14          1 1.57     2 1.44     3 1.04     4 1.00     5 0.87     6 0.81     7 5.00     8 0.97
9 0.85    10 1.39    15 0.94
15      EXIT THREE ELEVATED RELEASE     1/1780-6730/80
16        4.660  2.440100.000  0.0       0.0  104.0  0.0
17      C    0     0     0
```

XOQDOQ - BRUNSWICK ELEVATED RELEASE 1/1/80-6/30/80

THE JOINT FREQUENCY DISTRIBUTION, I=WIND SPEED CLASS, J= STABILITY CLASS

DIRECTION = N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
I= 1,J= 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 2,J= 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 3,J= 1	0.0	0.0	0.0	0.0	0.02	0.02	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 4,J= 1	0.0	0.02	0.05	0.02	0.12	0.26	0.10	0.07	0.05	0.0	0.0	0.0	0.0	0.0	0.0
I= 5,J= 1	0.05	0.07	0.10	0.24	0.36	0.17	0.02	0.0	0.02	0.24	0.34	0.05	0.0	0.0	0.10	0.0
I= 6,J= 1	0.0	0.0	0.05	0.10	0.0	0.0	0.05	0.02	0.0	0.05	0.22	0.02	0.0	0.07	0.07	0.02
I= 7,J= 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.05	0.0	0.0	0.07	0.02
I= 1,J= 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 2,J= 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 3,J= 2	0.02	0.0	0.02	0.0	0.05	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.05	0.02
I= 4,J= 2	0.05	0.07	0.05	0.07	0.24	0.29	0.10	0.05	0.19	0.10	0.12	0.12	0.0	0.0	0.05	0.17
I= 5,J= 2	0.07	0.10	0.10	0.17	0.17	0.07	0.05	0.02	0.05	0.48	0.84	0.10	0.0	0.02	0.17	0.19
I= 6,J= 2	0.0	0.0	0.02	0.07	0.0	0.0	0.02	0.0	0.02	0.22	0.60	0.07	0.0	0.17	0.07	0.10
I= 7,J= 2	0.0	0.0	0.07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36	0.05	0.0	0.02	0.05	0.02
I= 1,J= 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 2,J= 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 3,J= 3	0.05	0.0	0.02	0.05	0.05	0.05	0.07	0.07	0.02	0.0	0.0	0.05	0.0	0.0	0.07	0.12
I= 4,J= 3	0.10	0.12	0.07	0.17	0.12	0.17	0.17	0.07	0.05	0.31	0.26	0.14	0.02	0.07	0.26	0.34
I= 5,J= 3	0.07	0.26	0.19	0.19	0.12	0.02	0.10	0.0	0.10	0.31	0.55	0.17	0.05	0.14	0.12	0.34
I= 6,J= 3	0.05	0.0	0.10	0.10	0.0	0.0	0.02	0.0	0.10	0.34	0.38	0.17	0.0	0.14	0.17	0.0
I= 7,J= 3	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	0.05	0.0	0.02	0.07	0.0
I= 1,J= 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 2,J= 4	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.02	0.0	0.0	0.02
I= 3,J= 4	0.12	0.14	0.14	0.22	0.07	0.12	0.12	0.05	0.07	0.05	0.10	0.19	0.22	0.17	0.10	0.17
I= 4,J= 4	0.79	0.65	0.19	0.60	0.31	0.38	0.10	0.17	0.46	0.81	0.65	0.69	0.89	0.38	0.43	0.57
I= 5,J= 4	0.98	1.46	1.20	0.86	0.69	0.19	0.31	0.10	0.14	1.03	1.25	1.01	0.26	0.57	1.08	1.03
I= 6,J= 4	0.77	0.36	1.22	0.62	0.12	0.24	0.14	0.0	0.22	0.98	2.47	0.93	0.02	0.31	0.36	0.41
I= 7,J= 4	0.02	0.0	0.48	0.14	0.0	0.0	0.0	0.10	0.41	0.31	1.10	0.43	0.07	0.26	0.10	0.0
I= 1,J= 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 2,J= 5	0.02	0.0	0.02	0.0	0.02	0.0	0.0	0.02	0.05	0.0	0.0	0.0	0.02	0.02	0.0	0.0
I= 3,J= 5	0.0	0.02	0.02	0.05	0.05	0.0	0.02	0.05	0.07	0.10	0.10	0.05	0.14	0.02	0.02	0.05
I= 4,J= 5	0.14	0.19	0.19	0.17	0.29	0.24	0.10	0.12	0.17	0.29	0.46	0.46	0.36	0.14	0.19	0.31
I= 5,J= 5	0.46	0.86	0.89	0.60	0.91	0.36	0.43	0.26	0.19	1.10	1.44	1.39	0.46	0.26	0.74	0.69
I= 6,J= 5	0.31	0.43	0.67	0.60	0.0	0.12	0.41	0.46	0.36	0.36	2.49	1.37	0.14	0.38	0.41	0.60
I= 7,J= 5	0.0	0.0	0.14	0.02	0.05	0.02	0.14	0.36	0.79	0.46	0.91	0.60	0.02	0.02	0.0	0.0
I= 1,J= 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I= 2,J= 6	0.02	0.0	0.0	0.0	0.02	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0
I= 3,J= 6	0.02	0.02	0.05	0.05	0.07	0.02	0.02	0.07	0.02	0.05	0.0	0.05	0.14	0.02	0.02	0.0
I= 4,J= 6	0.02	0.17	0.02	0.31	0.14	0.10	0.17	0.26	0.17	0.29	0.22	0.43	0.50	0.10	0.07	0.07
I= 5,J= 6	0.26	0.41	0.74	0.22	0.34	0.05	0.17	0.14	0.12	0.24	0.41	0.57	0.57	0.31	0.24	0.26
I= 6,J= 6	0.22	0.34	0.24	0.0	0.0	0.0	0.02	0.22	0.07	0.10	0.19	0.31	0.12	0.22	0.36	0.48
I= 7,J= 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.05	0.0	0.07	0.0	0.0
I= 1,J= 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0
I= 2,J= 7	0.0	0.05	0.02	0.02	0.02	0.0	0.0	0.0	0.0	0.0	0.02	0.02	0.05	0.05	0.0	0.0
I= 3,J= 7	0.12	0.0	0.07	0.02	0.07	0.17	0.05	0.07	0.05	0.10	0.10	0.05	0.07	0.05	0.05	0.12
I= 4,J= 7	0.24	0.29	0.38	0.22	0.22	0.07	0.12	0.29	0.07	0.14	0.07	0.29	0.24	0.05	0.07	0.14
I= 5,J= 7	0.24	0.12	0.19	0.17	0.07	0.05	0.07	0.02	0.02	0.17	0.14	0.05	0.14	0.24	0.07	0.12
I= 6,J= 7	0.10	0.02	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.07	0.0	0.07	0.17	0.12	0.10
I= 7,J= 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.05	0.0	0.0
TOTAL	5.34	6.16	7.86	6.06	4.72	3.19	3.16	3.09	4.07	8.62	16.17	9.96	4.67	4.57	5.84	6.49

TOTAL HOURS CONSIDERED ARE 4175

WIND MEASURED AT 104.0 METERS.

THE MAXIMUM WIND SPEED (METERS/SEC) IN EACH CLASS IS: 0.335 1.565 3.353 5.588 8.270 11.176 11.623

THE CONV[illegible]SION FACTOR APPLIED TO THE WIND SPEED CLASSES IS 0.4[illegible]

DISTANCES AND TERRAIN HEIGHTS IN METERS AS FUNCTIONS OF DIRECTION FROM THE SITE:

DIRECTION	S	SSW	SW	WSW	W	WNW	NW	NNW	N	NNE	NE	ENE	E	ESE	SE	SSE
DISTANCE	402.	402.	402.	402.	402.	402.	402.	402.	402.	402.	402.	402.	402.	402.	402.	402.
ELEVATION	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.
DISTANCE	1207.	1207.	1207.	1175.	1078.	966.	966.	982.	998.	1014.	1014.	1014.	1078.	1094.	1078.	1110.
ELEVATION	6.	6.	6.	6.	6.	6.	8.	6.	6.	6.	6.	6.	6.	7.	6.	6.
DISTANCE	1674.	1545.	1432.	1191.	1110.	1030.	1127.	1030.	1030.	1030.	1207.	1078.	1094.	1110.	1094.	1191.
ELEVATION	6.	6.	6.	6.	6.	6.	8.	6.	6.	6.	6.	6.	6.	7.	6.	6.
DISTANCE	2012.	2012.	1674.	1207.	1207.	1207.	1207.	1207.	1207.	1207.	1465.	1207.	1207.	1207.	1207.	1207.
ELEVATION	6.	6.	6.	6.	6.	6.	8.	6.	6.	6.	6.	6.	6.	7.	6.	6.
DISTANCE	2382.	2317.	2012.	1609.	1400.	1271.	1287.	1368.	1368.	1465.	2012.	2012.	1513.	2012.	1271.	1271.
ELEVATION	6.	6.	6.	6.	6.	6.	8.	6.	6.	6.	6.	7.	7.	9.	6.	6.
DISTANCE	2527.	2816.	2736.	2012.	1738.	1304.	2012.	1561.	1416.	1770.	2816.	2816.	2012.	2816.	1320.	1287.
ELEVATION	6.	6.	6.	6.	5.	6.	9.	6.	6.	6.	6.	8.	7.	10.	6.	6.
DISTANCE	2816.	3621.	2816.	2816.	2012.	2012.	2816.	2012.	2012.	2012.	3605.	3621.	2816.	3621.	1513.	2012.
ELEVATION	6.	6.	6.	6.	6.	6.	10.	7.	6.	6.	6.	8.	8.	10.	6.	6.
DISTANCE	3621.	4426.	3621.	3621.	2816.	2816.	3621.	2816.	2816.	2237.	3621.	4426.	3621.	4426.	2012.	2816.
ELEVATION	6.	6.	6.	6.	11.	7.	10.	9.	6.	6.	6.	8.	8.	10.	6.	6.
DISTANCE	4426.	5230.	4426.	4426.	3621.	3621.	4426.	3621.	3621.	2816.	4426.	5230.	4426.	5230.	2816.	3621.
ELEVATION	6.	6.	6.	6.	12.	11.	12.	10.	10.	6.	6.	8.	8.	10.	6.	6.
DISTANCE	5230.	6035.	5230.	5230.	4426.	4426.	5230.	4426.	4426.	3621.	5230.	6035.	5230.	6035.	3621.	4426.
ELEVATION	6.	6.	6.	6.	12.	13.	12.	11.	10.	7.	9.	8.	8.	10.	6.	6.

EXIT THREE ELEVATED RELEASE 1/1/80-6/30/80

NO DECAY, UNDEPLETED

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.816E-09	8.869E-09	1.220E-08	1.570E-08	1.871E-08	1.813E-08	1.647E-08	1.470E-08	1.309E-08	1.170E-08	1.052E-08
SSW	6.613E-09	1.057E-08	1.342E-08	1.670E-08	1.982E-08	1.941E-08	1.784E-08	1.607E-08	1.444E-08	1.306E-08	1.176E-08
SW	1.145E-08	1.357E-08	1.531E-08	1.829E-08	2.151E-08	2.126E-08	1.973E-08	1.793E-08	1.621E-08	1.467E-08	1.333E-08
WSW	1.618E-08	1.766E-08	1.797E-08	1.950E-08	2.076E-08	1.956E-08	1.763E-08	1.572E-08	1.401E-08	1.254E-08	1.129E-08
W	3.142E-08	2.537E-08	1.877E-08	1.627E-08	1.559E-08	1.514E-08	1.374E-08	1.229E-08	1.104E-08	9.973E-09	9.063E-09
WNW	3.134E-08	2.223E-08	1.605E-08	1.382E-08	1.227E-08	1.130E-08	1.031E-08	9.095E-09	7.964E-09	7.039E-09	6.278E-09
NW	1.624E-08	1.533E-08	1.365E-08	1.247E-08	1.120E-08	1.002E-08	9.039E-09	8.119E-09	7.217E-09	6.465E-09	5.836E-09
NNW	6.289E-09	6.140E-09	6.172E-09	6.226E-09	6.719E-09	6.916E-09	6.833E-09	6.515E-09	6.074E-09	5.659E-09	5.277E-09
N	7.273E-09	1.196E-08	1.122E-08	1.140E-08	1.215E-08	1.259E-08	1.233E-08	1.131E-08	1.026E-08	9.316E-09	8.484E-09
NNE	1.959E-08	3.108E-08	3.012E-08	2.960E-08	2.644E-08	2.629E-08	2.368E-08	2.097E-08	1.863E-08	1.665E-08	1.498E-08
NE	4.075E-08	5.771E-08	5.059E-08	4.772E-08	4.548E-08	4.198E-08	3.785E-08	3.461E-08	3.153E-08	2.825E-08	2.546E-08
ENE	7.581E-09	1.580E-08	1.913E-08	2.278E-08	2.742E-08	2.785E-08	2.618E-08	2.398E-08	2.183E-08	1.988E-08	1.816E-08
E	2.078E-11	1.064E-09	3.970E-09	7.874E-09	1.281E-08	1.411E-08	1.379E-08	1.297E-08	1.204E-08	1.114E-08	1.032E-08
ESE	4.328E-09	9.629E-09	1.128E-08	1.315E-08	1.482E-08	1.410E-08	1.269E-08	1.131E-08	1.009E-08	9.042E-09	8.157E-09
SE	1.239E-08	2.050E-08	2.142E-08	2.134E-08	2.024E-08	1.820E-08	1.607E-08	1.417E-08	1.256E-08	1.121E-08	1.008E-08
SSE	6.824E-09	2.432E-08	2.672E-08	2.638E-08	2.458E-08	2.204E-08	1.946E-08	1.716E-08	1.521E-08	1.356E-08	1.218E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	9.513E-09	6.257E-09	4.543E-09	2.846E-09	2.037E-09	1.568E-09	1.266E-09	1.056E-09	9.030E-10	7.867E-10	6.956E-10
SSW	1.076E-08	7.180E-09	5.279E-09	3.357E-09	2.416E-09	1.869E-09	1.512E-09	1.263E-09	1.081E-09	9.416E-10	8.324E-10
SW	1.217E-08	8.272E-09	6.123E-09	3.922E-09	2.837E-09	2.199E-09	1.783E-09	1.492E-09	1.279E-09	1.116E-09	9.874E-10
WSW	1.024E-08	6.810E-09	4.980E-09	3.149E-09	2.264E-09	1.747E-09	1.412E-09	1.178E-09	1.007E-09	8.769E-10	7.746E-10
W	8.301E-09	5.756E-09	4.334E-09	2.848E-09	2.098E-09	1.648E-09	1.350E-09	1.139E-09	9.824E-10	8.619E-10	7.664E-10
WNW	5.657E-09	3.702E-09	2.689E-09	1.695E-09	1.222E-09	9.474E-10	7.694E-10	6.454E-10	5.544E-10	4.850E-10	4.304E-10
NW	5.311E-09	3.601E-09	2.676E-09	1.734E-09	1.271E-09	9.938E-10	8.114E-10	6.827E-10	5.875E-10	5.143E-10	4.565E-10
NNW	4.935E-09	3.669E-09	2.885E-09	1.997E-09	1.517E-09	1.217E-09	1.012E-09	8.642E-10	7.524E-10	6.652E-10	5.954E-10
N	7.767E-09	5.317E-09	3.942E-09	2.518E-09	1.811E-09	1.395E-09	1.124E-09	9.350E-10	7.965E-10	6.911E-10	6.085E-10
NNE	1.359E-08	9.046E-09	6.615E-09	4.178E-09	2.999E-09	2.310E-09	1.862E-09	1.551E-09	1.323E-09	1.150E-09	1.014E-09
NE	2.312E-08	1.541E-08	1.125E-08	7.055E-09	5.026E-09	3.845E-09	3.083E-09	2.555E-09	2.170E-09	1.878E-09	1.650E-09
ENE	1.666E-08	1.156E-08	8.594E-09	5.556E-09	4.033E-09	3.128E-09	2.535E-09	2.119E-09	1.812E-09	1.578E-09	1.394E-09
E	9.572E-09	6.891E-09	5.303E-09	3.568E-09	2.658E-09	2.103E-09	1.732E-09	1.467E-09	1.270E-09	1.117E-09	9.951E-10
ESE	7.411E-09	4.975E-09	3.671E-09	2.357E-09	1.715E-09	1.336E-09	1.089E-09	9.164E-10	7.886E-10	6.910E-10	6.140E-10
SE	9.141E-09	6.101E-09	4.486E-09	2.870E-09	2.089E-09	1.630E-09	1.330E-09	1.126E-09	9.649E-10	8.465E-10	7.532E-10
SSE	1.103E-08	7.305E-09	5.362E-09	3.355E-09	2.412E-09	1.860E-09	1.502E-09	1.252E-09	1.070E-09	9.306E-10	8.216E-10

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	1.302E-08	1.778E-08	1.621E-08	1.302E-08	1.050E-08	6.219E-09	2.864E-09	1.572E-09	1.056E-09	7.874E-10
SSW	1.424E-08	1.845E-08	1.755E-08	1.436E-08	1.173E-08	7.116E-09	3.367E-09	1.873E-09	1.265E-09	9.424E-10
SW	1.625E-08	2.069E-08	1.942E-08	1.612E-08	1.330E-08	8.164E-09	3.929E-09	2.203E-09	1.494E-09	1.116E-09
WSW	1.658E-08	1.994E-08	1.738E-08	1.394E-08	1.127E-08	6.760E-09	3.163E-09	1.751E-09	1.180E-09	8.776E-10
W	1.912E-08	1.556E-08	1.355E-08	1.099E-08	9.050E-09	5.690E-09	2.845E-09	1.649E-09	1.140E-09	8.622E-10
WNW	1.643E-08	1.218E-08	1.009E-08	7.935E-09	6.273E-09	3.686E-09	1.706E-09	9.495E-10	6.462E-10	4.854E-10
NW	1.350E-08	1.095E-08	8.931E-09	7.188E-09	5.828E-09	3.570E-09	1.738E-09	9.947E-10	6.852E-10	5.146E-10
NNW	6.184E-09	6.697E-09	6.727E-09	6.041E-09	5.264E-09	3.602E-09	1.981E-09	1.215E-09	8.639E-10	6.652E-10
N	1.146E-08	1.220E-08	1.204E-08	1.026E-08	8.465E-09	5.250E-09	2.520E-09	1.398E-09	9.363E-10	6.918E-10
NNE	3.010E-08	2.774E-08	2.329E-08	1.855E-08	1.496E-08	8.975E-09	4.196E-09	2.315E-09	1.553E-09	1.151E-09
NE	5.090E-08	3.442E-08	3.765E-08	3.116E-08	2.542E-08	1.527E-08	7.085E-09	3.855E-09	2.559E-09	1.880E-09
ENE	2.001E-08	2.63[illegible]E-08	2.575E-08	2.170E-08	1.812E-08	1.136E-08	5.554E-09	3.132E-09	2.121E-09	1.579E-09
[illegible]	5.059E-09	1.227E-08	1.355E-08	1.196E-08	1.029E-08	6.781E-09	3.549E-09	2.103E-09	1.468E-09	1.1[illegible]E-09

SE	2.418E-08	1.958E-08	1.523E-08	1.251E-08	1.007E-08	6.059E-09	2.882E-09	1.632E-09	1.121E-09	8.470E-10
SSE	2.603E-08	2.385E-08	1.923E-08	1.514E-08	1.216E-08	7.253E-09	3.374E-09	1.864E-09	1.254E-09	9.314E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	100.00	REF. WIND HEIGHT	(METERS)	104.0
DIAMETER	(METERS)	2.44	BUILDING HEIGHT	(METERS)	0.0
EXIT VELOCITY	(METERS)	4.66	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	0.0
			HEAT EMISSION RATE	(CAL/SEC)	0.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)	
ELEVATED	LESS THAN	0.932
MIXED	BETWEEN	0.932 AND 4.660
GROUND LEVEL	ABOVE	4.660

AT THE MEASURED WIND HEIGHT (104.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC)		WIND SPEED (METERS/SEC)	
	STABLE CONDITIONS		UNSTABLE/NEUTRAL CONDITIONS	
ELEVATED	LESS THAN	0.932	LESS THAN	0.932
MIXED	BETWEEN	0.932 AND 4.660	BETWEEN	0.932 AND 4.660
GROUND LEVEL	ABOVE	4.660	ABOVE	4.660

AVERAGE EFFECTIVE STACK HEIGHT IN METERS FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01
SSW	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01
SW	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01
WSW	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01
W	1.003E+02	9.695E+01	9.435E+01	9.423E+01	9.423E+01	9.423E+01	9.423E+01	9.423E+01	9.423E+01	9.423E+01
WNW	1.008E+02	9.920E+01	9.534E+01	9.406E+01	9.406E+01	9.406E+01	9.406E+01	9.406E+01	9.406E+01	9.406E+01
NW	9.816E+01	9.666E+01	9.484E+01	9.397E+01	9.397E+01	9.397E+01	9.397E+01	9.397E+01	9.397E+01	9.397E+01
NNW	9.978E+01	9.791E+01	9.576E+01	9.509E+01	9.509E+01	9.509E+01	9.509E+01	9.509E+01	9.509E+01	9.509E+01
N	9.948E+01	9.867E+01	9.596E+01	9.521E+01	9.521E+01	9.521E+01	9.521E+01	9.521E+01	9.521E+01	9.521E+01
NNE	9.913E+01	9.866E+01	9.807E+01	9.791E+01	9.791E+01	9.791E+01	9.791E+01	9.791E+01	9.791E+01	9.791E+01
NE	9.837E+01	9.837E+01	9.708E+01	9.628E+01	9.593E+01	9.593E+01	9.593E+01	9.593E+01	9.593E+01	9.593E+01
ENE	9.870E+01	9.766E+01	9.698E+01	9.694E+01	9.694E+01	9.694E+01	9.694E+01	9.694E+01	9.694E+01	9.694E+01
E	1.005E+02	9.575E+01	9.946E+01	9.946E+01	9.946E+01	9.946E+01	9.946E+01	9.946E+01	9.946E+01	9.946E+01
ESE	9.777E+01	9.585E+01	9.529E+01	9.529E+01	9.529E+01	9.529E+01	9.529E+01	9.529E+01	9.529E+01	9.529E+01
SE	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01
SSE	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01

EXIT TABLE ELEVATED RELEASE 1/1/80-6/30/80

2.268 DAY DECAY, UNDEPLETED

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.817E-09	8.663E-09	1.219E-08	1.568E-08	1.868E-08	1.809E-08	1.643E-08	1.465E-08	1.304E-08	1.164E-08	1.046E-08
SSW	6.611E-09	1.056E-08	1.341E-08	1.668E-08	1.979E-08	1.937E-08	1.779E-08	1.602E-08	1.438E-08	1.294E-08	1.170E-08
SW	1.144E-08	1.357E-08	1.530E-08	1.827E-08	2.146E-08	2.122E-08	1.967E-08	1.786E-08	1.614E-08	1.460E-08	1.325E-08
WSW	1.818E-08	1.765E-08	1.796E-08	1.948E-08	2.072E-08	1.951E-08	1.758E-08	1.566E-08	1.395E-08	1.248E-08	1.124E-08
W	3.141E-08	2.535E-08	1.875E-08	1.625E-08	1.556E-08	1.515E-08	1.370E-08	1.225E-08	1.099E-08	9.919E-09	9.007E-09
WNW	3.133E-08	2.221E-08	1.604E-08	1.380E-08	1.224E-08	1.127E-08	1.028E-08	9.060E-09	7.929E-09	7.064E-09	6.242E-09
NW	1.623E-08	1.532E-08	1.364E-08	1.245E-08	1.117E-08	9.989E-09	9.011E-09	8.089E-09	7.186E-09	6.434E-09	5.804E-09
NNW	6.288E-09	6.135E-09	6.165E-09	6.216E-09	6.704E-09	6.896E-09	6.809E-09	6.465E-09	6.043E-09	5.625E-09	5.242E-09
N	7.271E-09	1.195E-08	1.121E-08	1.139E-08	1.217E-08	1.256E-08	1.229E-08	1.126E-08	1.021E-08	9.257E-09	8.423E-09
NNE	1.958E-08	3.107E-08	3.010E-08	2.957E-08	2.839E-08	2.624E-08	2.362E-08	2.091E-08	1.857E-08	1.659E-08	1.492E-08
NE	4.075E-08	5.769E-08	5.156E-08	4.768E-08	4.542E-08	4.191E-08	3.777E-08	3.452E-08	3.144E-08	2.816E-08	2.536E-08
ENE	7.586E-09	1.579E-08	1.911E-08	2.276E-08	2.738E-08	2.780E-08	2.611E-08	2.391E-08	2.176E-08	1.980E-08	1.808E-08
E	2.078E-11	1.064E-09	3.966E-09	7.863E-09	1.278E-08	1.407E-08	1.373E-08	1.291E-08	1.197E-08	1.107E-08	1.024E-08
ESE	4.327E-09	9.625E-09	1.127E-08	1.313E-08	1.480E-08	1.407E-08	1.265E-08	1.126E-08	1.004E-08	8.995E-09	8.109E-09
SE	1.239E-08	2.049E-08	2.140E-08	2.132E-08	2.020E-08	1.816E-08	1.603E-08	1.413E-08	1.251E-08	1.116E-08	1.003E-08
SSE	6.827E-09	2.431E-08	2.669E-08	2.634E-08	2.454E-08	2.198E-08	1.940E-08	1.710E-08	1.514E-08	1.349E-08	1.211E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	9.454E-09	6.197E-09	4.483E-09	2.790E-09	1.981E-09	1.513E-09	1.212E-09	1.004E-09	8.517E-10	7.364E-10	6.462E-10
SSW	1.064E-08	7.123E-09	5.224E-09	3.304E-09	2.368E-09	1.820E-09	1.464E-09	1.216E-09	1.034E-09	8.960E-10	7.875E-10
SW	1.210E-08	8.191E-09	6.044E-09	3.847E-09	2.765E-09	2.129E-09	1.716E-09	1.427E-09	1.215E-09	1.054E-09	9.267E-10
WSW	1.018E-08	6.752E-09	4.924E-09	3.096E-09	2.213E-09	1.697E-09	1.363E-09	1.131E-09	9.605E-10	8.311E-10	7.296E-10
W	8.244E-09	5.694E-09	4.271E-09	2.783E-09	2.033E-09	1.583E-09	1.286E-09	1.076E-09	9.200E-10	8.062E-10	7.055E-10
WNW	5.621E-09	3.867E-09	2.855E-09	1.863E-09	1.392E-09	9.177E-10	7.403E-10	6.168E-10	5.262E-10	4.572E-10	4.029E-10
NW	5.280E-09	3.570E-09	2.646E-09	1.705E-09	1.242E-09	9.655E-10	7.836E-10	6.555E-10	5.607E-10	4.880E-10	4.306E-10
NNW	4.898E-09	3.626E-09	2.839E-09	1.948E-09	1.468E-09	1.167E-09	9.624E-10	8.147E-10	7.033E-10	6.166E-10	5.472E-10
N	7.704E-09	5.250E-09	3.876E-09	2.454E-09	1.751E-09	1.337E-09	1.069E-09	8.620E-10	7.453E-10	6.416E-10	5.605E-10
NNE	1.352E-08	8.978E-09	6.549E-09	4.114E-09	2.938E-09	2.251E-09	1.805E-09	1.495E-09	1.268E-09	1.096E-09	9.613E-10
NE	2.362E-08	1.532E-08	1.115E-08	6.964E-09	4.939E-09	3.762E-09	3.002E-09	2.477E-09	2.094E-09	1.803E-09	1.577E-09
ENE	1.658E-08	1.142E-08	8.510E-09	5.474E-09	3.953E-09	3.050E-09	2.459E-09	2.044E-09	1.740E-09	1.507E-09	1.324E-09
E	9.492E-09	6.806E-09	5.216E-09	3.482E-09	2.573E-09	2.020E-09	1.650E-09	1.386E-09	1.190E-09	1.038E-09	9.177E-10
ESE	7.362E-09	4.925E-09	3.622E-09	2.309E-09	1.668E-09	1.291E-09	1.045E-09	8.723E-10	7.453E-10	6.482E-10	5.717E-10
SE	9.091E-09	6.050E-09	4.434E-09	2.816E-09	2.032E-09	1.569E-09	1.267E-09	1.055E-09	8.983E-10	7.787E-10	6.845E-10
SSE	1.096E-08	7.231E-09	5.260E-09	3.296E-09	2.355E-09	1.806E-09	1.450E-09	1.202E-09	1.021E-09	8.836E-10	7.757E-10

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	1.306E-08	1.775E-08	1.616E-08	1.297E-08	1.044E-08	6.159E-09	2.807E-09	1.517E-09	1.005E-09	7.371E-10
SSW	1.423E-08	1.891E-08	1.751E-08	1.430E-08	1.168E-08	7.660E-09	3.515E-09	1.823E-09	1.218E-09	8.968E-10
SW	1.623E-08	2.065E-08	1.936E-08	1.604E-08	1.322E-08	8.104E-09	3.854E-09	2.133E-09	1.429E-09	1.054E-09
WSW	1.657E-08	1.991E-08	1.783E-08	1.388E-08	1.122E-08	6.702E-09	3.109E-09	1.701E-09	1.132E-09	8.319E-10
W	1.911E-08	1.553E-08	1.356E-08	1.099E-08	8.995E-09	5.628E-09	2.781E-09	1.584E-09	1.076E-09	8.006E-10
WNW	1.642E-08	1.216E-08	1.066E-08	7.900E-09	6.238E-09	3.652E-09	1.674E-09	9.198E-10	6.176E-10	4.575E-10
NW	1.348E-08	1.093E-08	9.503E-09	7.157E-09	5.797E-09	3.539E-09	1.708E-09	9.664E-10	6.560E-10	4.883E-10
NNW	6.181E-09	6.681E-09	6.703E-09	6.610E-09	5.228E-09	3.559E-09	1.933E-09	1.165E-09	8.144E-10	6.166E-10
N	1.145E-08	1.217E-08	1.145E-08	1.015E-08	8.404E-09	5.185E-09	2.457E-09	1.340E-09	8.833E-10	6.423E-10
NNE	3.006E-08	2.770E-08	2.323E-08	1.848E-08	1.489E-08	8.908E-09	4.133E-09	2.256E-09	1.497E-09	1.097E-09
NE	5.086E-08	4.436E-08	3.757E-08	3.107E-08	2.532E-08	1.518E-08	6.995E-09	3.772E-09	2.481E-09	1.806E-09
ENE	2.005E-08	2.654E-08	2.568E-08	2.163E-08	1.803E-08	1.127E-08	5.472E-09	3.054E-09	2.047E-09	1.508E-09
E	653E-09	1.226E-08	1.349E-08	1.190E-08	1.021E-0	6.696E-09	3.463E-09	2.019E-09	1.387E-09	1.039

SE	2.116E-08	1.954E-08	1.563E-08	1.246E-08	1.002E-08	6.008E-09	2.827E-09	1.572E-09	1.056E-09	7.792E-10
SSE	2.691E-08	2.380E-08	1.917E-08	1.507E-08	1.209E-08	7.186E-09	3.314E-09	1.810E-09	1.204E-09	8.849E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	100.00	REP. WIND HEIGHT	(METERS)	104.0
DIAMETER	(METERS)	2.44	BUILDING HEIGHT	(METERS)	0.0
EXIT VELOCITY	(METERS)	4.66	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	0.0
			HEAT EMISSION RATE	(CAL/SEC)	0.0

AT THE RELEASE HEIGHT:					AT THE MEASURED WIND HEIGHT (104.0 METERS):							
VENT RELEASE MODE	WIND SPEED (METERS/SEC)				VENT RELEASE MODE	WIND SPEED (METERS/SEC)				WIND SPEED (METERS/SEC)		
						STABLE CONDITIONS				UNSTABLE/NEUTRAL CONDITIONS		
ELEVATED	LESS THAN	0.932			ELEVATED	LESS THAN	0.932			LESS THAN	0.932	
MIXED	BETWEEN	0.932	AND	4.660	MIXED	BETWEEN	0.932	AND	4.660	BETWEEN	0.932	AND 4.660
GROUND LEVEL	ABOVE	4.660			GROUND LEVEL	ABOVE	4.660			ABOVE	4.660	

AVERAGE EFFECTIVE STACK HEIGHT IN METERS FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01
SSW	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01
SW	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01
WSW	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01
W	1.003E+02	9.695E+01	9.435E+01	9.423E+01	9.423E+01	9.423E+01	9.423E+01	9.423E+01	9.423E+01	9.423E+01
WNW	1.008E+02	9.920E+01	9.534E+01	9.406E+01	9.406E+01	9.406E+01	9.406E+01	9.406E+01	9.406E+01	9.406E+01
NW	9.816E+01	9.666E+01	9.484E+01	9.397E+01	9.397E+01	9.397E+01	9.397E+01	9.397E+01	9.397E+01	9.397E+01
NNW	9.978E+01	9.791E+01	9.578E+01	9.509E+01	9.509E+01	9.509E+01	9.509E+01	9.509E+01	9.509E+01	9.509E+01
N	9.948E+01	9.667E+01	9.596E+01	9.521E+01	9.521E+01	9.521E+01	9.521E+01	9.521E+01	9.521E+01	9.521E+01
NNE	9.913E+01	9.886E+01	9.807E+01	9.791E+01	9.791E+01	9.791E+01	9.791E+01	9.791E+01	9.791E+01	9.791E+01
NE	9.837E+01	9.837E+01	9.788E+01	9.628E+01	9.593E+01	9.593E+01	9.593E+01	9.593E+01	9.593E+01	9.593E+01
ENE	9.870E+01	9.760E+01	9.698E+01	9.694E+01	9.694E+01	9.694E+01	9.694E+01	9.694E+01	9.694E+01	9.694E+01
E	1.005E+02	9.975E+01	9.946E+01	9.946E+01	9.946E+01	9.946E+01	9.946E+01	9.946E+01	9.946E+01	9.946E+01
ESE	9.777E+01	9.565E+01	9.529E+01	9.529E+01	9.529E+01	9.529E+01	9.529E+01	9.529E+01	9.529E+01	9.529E+01
SE	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01
SSE	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01

EXIT THREE ELEVATED RELEASE 1/1/80-6/30/80

8.000 DAY DECAY, DEPLETED

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

SECTOR	0.250	0.500	0.750	1.000	1.500	2.000	2.5[illegible]	3.000	3.500	4.000	4.500
S	3.618E-09	6.791E-09	1.201E-08	1.547E-08	1.837E-08	1.769E-08	1.[illegible]E-08	1.415E-08	1.253E-08	1.113E-08	9.956E-09
SSW	6.613E-09	1.347E-08	1.317E-08	1.644E-08	1.945E-08	1.895E-08	1.730E-08	1.551E-08	1.386E-08	1.242E-08	1.118E-08
SW	1.145E-08	1.345E-08	1.505E-08	1.799E-08	2.111E-08	2.076E-08	1.916E-08	1.732E-08	1.558E-08	1.404E-08	1.271E-08
WSW	1.818E-08	1.750E-08	1.763E-08	1.911E-08	2.028E-08	1.901E-08	1.705E-08	1.511E-08	1.340E-08	1.194E-08	1.071E-08
W	3.142E-08	2.514E-08	1.836E-08	1.584E-08	1.515E-08	1.475E-08	1.330E-08	1.187E-08	1.063E-08	9.580E-09	8.688E-09
WNW	3.134E-08	2.203E-08	1.570E-08	1.344E-08	1.189E-08	1.092E-08	9.928E-09	8.719E-09	7.802E-09	6.993E-09	5.946E-09
NW	1.624E-08	1.519E-08	1.335E-08	1.212E-08	1.084E-08	9.675E-09	8.714E-09	7.810E-09	6.926E-09	6.191E-09	5.577E-09
NNW	5.289E-09	6.083E-09	6.038E-09	6.064E-09	6.542E-09	6.738E-09	6.658E-09	6.343E-09	5.911E-09	5.502E-09	5.126E-09
N	7.272E-09	1.165E-08	1.099E-08	1.116E-08	1.192E-08	1.228E-08	1.200E-08	1.097E-08	9.915E-09	8.974E-09	8.151E-09
NNE	1.959E-08	3.080E-08	2.950E-08	2.890E-08	2.769E-08	2.550E-08	2.287E-08	2.017E-08	1.785E-08	1.590E-08	1.426E-08
NE	4.075E-08	5.719E-08	4.554E-08	4.659E-08	4.430E-08	4.077E-08	3.664E-08	3.340E-08	3.034E-08	2.710E-08	2.435E-08
ENE	7.561E-09	1.566E-08	1.879E-08	2.238E-08	2.690E-08	2.723E-08	2.550E-08	2.327E-08	2.112E-08	1.918E-08	1.747E-08
E	2.078E-11	1.056E-09	3.942E-09	7.837E-09	1.267E-08	1.386E-08	1.346E-08	1.260E-08	1.165E-08	1.074E-08	9.909E-09
ESE	4.327E-09	9.543E-09	1.108E-08	1.291E-08	1.452E-08	1.374E-08	1.230E-08	1.090E-08	9.676E-09	8.637E-09	7.761E-09
SE	1.239E-08	2.031E-08	2.097E-08	2.083E-08	1.967E-08	1.761E-08	1.548E-08	1.359E-08	1.200E-08	1.067E-08	9.559E-09
SSE	6.823E-09	2.410E-08	2.615E-08	2.571E-08	2.386E-08	2.131E-08	1.873E-08	1.645E-08	1.451E-08	1.290E-08	1.154E-08

ANNUAL AVERAGE CHI/Q (SEC/METER CUBED) DISTANCE IN MILES

BEARING	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	8.965E-09	5.791E-09	4.151E-09	2.554E-09	1.802E-09	1.372E-09	1.098E-09	9.095E-10	7.725E-10	6.704E-10	5.887E-10
SSW	1.014E-08	6.706E-09	4.881E-09	3.059E-09	2.181E-09	1.671E-09	1.343E-09	1.115E-09	9.491E-10	8.243E-10	7.246E-10
SW	1.156E-08	7.751E-09	5.662E-09	3.590E-09	2.571E-09	1.977E-09	1.592E-09	1.325E-09	1.129E-09	9.820E-10	8.644E-10
WSW	9.675E-09	6.336E-09	4.583E-09	2.852E-09	2.025E-09	1.547E-09	1.239E-09	1.027E-09	8.714E-10	7.550E-10	6.622E-10
W	7.940E-09	5.459E-09	4.085E-09	2.656E-09	1.934E-09	1.511E-09	1.229E-09	1.030E-09	8.825E-10	7.699E-10	6.800E-10
WNW	5.339E-09	3.443E-09	2.473E-09	1.531E-09	1.088E-09	8.332E-10	6.694E-10	5.561E-10	4.734E-10	4.110E-10	3.614E-10
NW	5.066E-09	3.408E-09	2.518E-09	1.616E-09	1.173E-09	9.100E-10	7.376E-10	6.166E-10	5.273E-10	4.591E-10	4.049E-10
NNW	4.792E-09	3.553E-09	2.787E-09	1.921E-09	1.453E-09	1.161E-09	9.616E-10	8.179E-10	7.095E-10	6.252E-10	5.574E-10
N	7.443E-09	5.043E-09	3.710E-09	2.342E-09	1.668E-09	1.274E-09	1.019E-09	8.424E-10	7.132E-10	6.158E-10	5.387E-10
NNE	1.289E-08	8.472E-09	6.138E-09	3.822E-09	2.711E-09	2.066E-09	1.653E-09	1.366E-09	1.157E-09	1.000E-09	8.754E-10
NE	2.205E-08	1.454E-08	1.052E-08	6.510E-09	4.585E-09	3.474E-09	2.762E-09	2.271E-09	1.915E-09	1.648E-09	1.437E-09
ENE	1.599E-08	1.094E-08	8.122E-09	5.203E-09	3.749E-09	2.891E-09	2.331E-09	1.939E-09	1.652E-09	1.434E-09	1.261E-09
E	9.[illegible]E-09	6.536E-09	4.999E-09	3.336E-09	2.471E-09	1.947E-09	1.597E-09	1.345E-09	1.163E-09	1.021E-09	9.068E-10
ESE	7.025E-09	4.653E-09	3.401E-09	2.155E-09	1.552E-09	1.201E-09	9.724E-10	8.133E-10	6.964E-10	6.081E-10	5.373E-10
SE	8.638E-09	5.692E-09	4.146E-09	2.615E-09	1.881E-09	1.452E-09	1.173E-09	9.790E-10	8.362E-10	7.261E-10	6.416E-10
SSE	1.042E-08	6.806E-09	4.913E-09	3.049E-09	2.184E-09	1.651E-09	1.321E-09	1.093E-09	9.268E-10	8.019E-10	7.026E-10

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

SEGMENT BOUNDARIES IN MILES

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	1.283E-08	1.742E-08	1.576E-08	1.246E-08	9.938E-09	5.767E-09	2.575E-09	1.377E-09	9.112E-10	6.704E-10
SSW	1.403E-08	1.856E-08	1.702E-08	1.378E-08	1.116E-08	6.657E-09	3.074E-09	1.676E-09	1.117E-09	8.243E-10
SW	1.603E-08	2.026E-08	1.885E-08	1.549E-08	1.268E-08	7.678E-09	3.602E-09	1.981E-09	1.327E-09	9.821E-10
WSW	1.826E-08	1.945E-08	1.679E-08	1.333E-08	1.069E-08	6.299E-09	2.869E-09	1.551E-09	1.028E-09	7.551E-10
W	1.874E-08	1.512E-08	1.311E-08	1.058E-08	8.675E-09	5.399E-09	2.655E-09	1.512E-09	1.030E-09	7.700E-10
WNW	1.610E-08	1.180E-08	9.769E-09	7.575E-09	5.942E-09	3.433E-09	1.544E-09	8.357E-10	5.570E-10	4.111E-10
NW	1.321E-08	1.061E-08	8.869E-09	6.898E-09	5.569E-09	3.381E-09	1.619E-09	9.112E-10	6.172E-10	4.592E-10
NNW	6.059E-09	6.523E-09	6.253E-09	5.879E-09	5.115E-09	3.488E-09	1.966E-09	1.159E-09	8.177E-10	6.251E-10
N	1.126E-08	1.191E-08	1.166E-08	9.857E-09	8.132E-09	4.984E-09	2.346E-09	1.277E-09	8.437E-10	6.161E-10
NNE	2.952E-08	2.698E-08	2.249E-08	1.777E-08	1.424E-08	8.416E-09	3.843E-09	2.074E-09	1.369E-09	1.000E-09
NE	4.993E-08	4.324E-08	3.644E-08	2.998E-08	2.432E-08	1.442E-08	6.546E-09	3.485E-09	2.270E-09	1.649E-09
ENE	1.969E-08	2.606E-08	2.567E-08	2.100E-08	1.743E-[illegible]	1.081E-08	5.205E-09	2.896E-09	1.942E-09	1.43[illegible]-09
E	1.032E-09	1.213E-08	1.323E-08	1.157E-08	9.880E-[illegible]	6.437E-09	3.321E-09	1.947E-09	1.349E-09	1.02[illegible]-09

SE	2.076E-08	1.961E-06	1.529E-08	1.195E-08	9.546E-09	5.660E-09	2.629E-09	1.455E-09	9.801E-10	7.281E-10
SSE	2.550E-08	2.314E-06	1.851E-08	1.445E-08	1.153E-08	6.767E-09	3.070E-09	1.656E-09	1.095E-09	8.021E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	100.00	REF. WIND HEIGHT	(METERS)	104.0
DIAMETER	(METERS)	2.44	BUILDING HEIGHT	(METERS)	0.0
EXIT VELOCITY	(METERS)	4.66	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	0.0
			HEAT EMISSION RATE	(CAL/SEC)	0.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)			
ELEVATED	LESS THAN	0.932		
MIXED	BETWEEN	0.932	AND	4.660
GROUND LEVEL	ABOVE	4.660		

AT THE MEASURED WIND HEIGHT (104.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC)				WIND SPEED (METERS/SEC)			
	STABLE CONDITIONS				UNSTABLE/NEUTRAL CONDITIONS			
ELEVATED	LESS THAN	0.932			LESS THAN	0.932		
MIXED	BETWEEN	0.932	AND	4.660	BETWEEN	0.932	AND	4.660
GROUND LEVEL	ABOVE	4.660			ABOVE	4.660		

AVERAGE EFFECTIVE STACK HEIGHT IN METERS FOR EACH SEGMENT

DIRECTION FROM SITE	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01
SSW	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01	9.954E+01
SW	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01	9.912E+01
WSW	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01	9.966E+01
W	1.003E+02	9.695E+01	9.435E+01	9.423E+01	9.423E+01	9.423E+01	9.423E+01	9.423E+01	9.423E+01	9.423E+01
WNW	1.008E+02	9.720E+01	9.534E+01	9.406E+01	9.406E+01	9.406E+01	9.406E+01	9.406E+01	9.406E+01	9.406E+01
NW	9.816E+01	9.666E+01	9.484E+01	9.397E+01	9.397E+01	9.397E+01	9.397E+01	9.397E+01	9.397E+01	9.397E+01
NNW	9.978E+01	9.791E+01	9.578E+01	9.509E+01	9.509E+01	9.509E+01	9.509E+01	9.509E+01	9.509E+01	9.509E+01
N	9.948E+01	9.867E+01	9.596E+01	9.521E+01	9.521E+01	9.521E+01	9.521E+01	9.521E+01	9.521E+01	9.521E+01
NNE	9.913E+01	9.886E+01	9.807E+01	9.791E+01	9.791E+01	9.791E+01	9.791E+01	9.791E+01	9.791E+01	9.791E+01
NE	9.837E+01	9.837E+01	9.788E+01	9.628E+01	9.593E+01	9.593E+01	9.593E+01	9.593E+01	9.593E+01	9.593E+01
ENE	9.870E+01	9.760E+01	9.698E+01	9.694E+01	9.694E+01	9.694E+01	9.694E+01	9.694E+01	9.694E+01	9.694E+01
E	1.005E+02	9.975E+01	9.946E+01	9.946E+01	9.946E+01	9.946E+01	9.946E+01	9.946E+01	9.946E+01	9.946E+01
ESE	9.777E+01	9.585E+01	9.529E+01	9.529E+01	9.529E+01	9.529E+01	9.529E+01	9.529E+01	9.529E+01	9.529E+01
SE	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01	9.945E+01
SSE	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01	9.979E+01

EXIT THREE ELEVATED RELEASE 1/1/60-6/30/60

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) AT FIXED POINTS BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	DISTANCES IN MILES 0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	6.576E-10	5.733E-10	5.440E-10	5.272E-10	3.814E-10	2.940E-10	2.315E-10	1.854E-10	1.506E-10	1.239E-10	1.030E-10
SSW	9.258E-10	7.625E-10	6.620E-10	6.008E-10	4.132E-10	3.123E-10	2.434E-10	1.938E-10	1.570E-10	1.290E-10	1.073E-10
SW	1.233E-09	1.008E-09	8.693E-10	7.764E-10	5.296E-10	3.989E-10	3.103E-10	2.469E-10	1.999E-10	1.642E-10	1.366E-10
WSW	1.664E-09	1.284E-09	9.695E-10	8.067E-10	5.040E-10	3.652E-10	2.782E-10	2.189E-10	1.762E-10	1.444E-10	1.201E-10
W	1.755E-09	1.302E-09	9.212E-10	6.837E-10	3.655E-10	2.650E-10	1.958E-10	1.515E-10	1.208E-10	9.867E-11	8.204E-11
WNW	1.485E-09	1.099E-09	7.721E-10	5.687E-10	3.177E-10	2.172E-10	1.600E-10	1.236E-10	9.850E-11	8.039E-11	6.684E-11
NW	1.080E-09	7.986E-10	5.607E-10	4.125E-10	2.301E-10	1.572E-10	1.158E-10	8.936E-11	7.122E-11	5.813E-11	4.833E-11
NNW	4.396E-10	3.303E-10	2.402E-10	1.842E-10	1.079E-10	7.571E-11	5.663E-11	4.411E-11	3.532E-11	2.886E-11	2.402E-11
N	8.493E-10	6.383E-10	5.114E-10	4.203E-10	2.648E-10	1.925E-10	1.470E-10	1.158E-10	9.326E-11	7.645E-11	6.358E-11
NNE	2.878E-09	2.162E-09	1.619E-09	1.269E-09	7.616E-10	5.410E-10	4.075E-10	3.187E-10	2.558E-10	2.093E-10	1.741E-10
NE	5.583E-09	4.209E-09	3.065E-09	2.386E-09	1.413E-09	9.951E-10	7.454E-10	5.823E-10	4.668E-10	3.818E-10	3.175E-10
ENE	1.468E-09	1.175E-09	9.712E-10	8.455E-10	5.616E-10	4.183E-10	3.234E-10	2.566E-10	2.074E-10	1.703E-10	1.416E-10
E	1.115E-10	1.366E-10	1.839E-10	2.144E-10	1.739E-10	1.397E-10	1.122E-10	9.076E-11	7.410E-11	6.108E-11	5.081E-11
ESE	9.865E-10	7.711E-10	6.091E-10	5.069E-10	3.256E-10	2.385E-10	1.828E-10	1.443E-10	1.164E-10	9.543E-11	7.936E-11
SE	1.662E-09	1.412E-09	1.048E-09	8.211E-10	4.927E-10	3.499E-10	2.636E-10	2.061E-10	1.654E-10	1.354E-10	1.126E-10
SSE	1.897E-09	1.[illegible]2E-09	1.076E-09	8.492E-10	5.130E-10	3.656E-10	2.760E-10	2.160E-10	1.735E-10	1.420E-10	1.181E-10

DIRECTION FROM SITE	DISTANCES IN MILES 5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	8.656E-11	4.543E-11	2.883E-11	1.510E-11	9.475E-12	6.685E-12	5.000E-12	3.895E-12	3.126E-12	2.568E-12	2.148E-12
SSW	1.022E-11	4.743E-11	3.018E-11	1.587E-11	9.999E-12	7.112E-12	5.352E-12	4.187E-12	3.371E-12	2.775E-12	2.325E-12
SW	1.148E-10	6.040E-11	3.842E-11	2.023E-11	1.275E-11	9.086E-12	6.845E-12	5.359E-12	4.317E-12	3.555E-12	2.979E-12
WSW	1.011E-10	5.337E-11	3.409E-11	1.812E-11	1.151E-11	8.347E-12	6.364E-12	5.025E-12	4.071E-12	3.366E-12	2.826E-12
W	6.923E-11	3.675E-11	2.363E-11	1.274E-11	8.182E-12	5.985E-12	4.718E-12	3.767E-12	3.076E-12	2.557E-12	2.156E-12
WNW	5.641E-11	2.999E-11	1.926E-11	1.041E-11	6.699E-12	4.992E-12	3.876E-12	3.099E-12	2.532E-12	2.106E-12	1.777E-12
NW	4.079E-11	2.167E-11	1.394E-11	7.534E-12	4.843E-12	3.613E-12	2.806E-12	2.244E-12	1.834E-12	1.525E-12	1.287E-12
NNW	2.025E-11	1.072E-11	6.876E-12	3.687E-12	2.357E-12	1.736E-12	1.337E-12	1.063E-12	8.652E-13	7.177E-13	6.044E-13
N	5.352E-11	2.824E-11	1.803E-11	9.576E-12	6.076E-12	4.399E-12	3.351E-12	2.643E-12	2.140E-12	1.769E-12	1.486E-12
NNE	1.467E-10	7.758E-11	4.967E-11	2.654E-11	1.692E-11	1.239E-11	9.504E-12	7.536E-12	6.124E-12	5.073E-12	4.269E-12
NE	2.676E-10	1.417E-10	9.078E-11	4.861E-11	3.104E-11	2.280E-11	1.753E-11	1.392E-11	1.133E-11	9.392E-12	7.906E-12
ENE	1.191E-10	6.271E-11	3.999E-11	2.140E-11	1.331E-11	9.537E-12	7.210E-12	5.659E-12	4.565E-12	3.764E-12	3.157E-12
E	4.264E-11	2.250E-11	1.410E-11	7.521E-12	4.562E-12	3.165E-12	2.339E-12	1.806E-12	1.440E-12	1.178E-12	9.823E-13
ESE	6.679E-11	3.522E-11	2.247E-11	1.191E-11	7.546E-12	5.446E-12	4.138E-12	3.260E-12	2.637E-12	2.177E-12	1.828E-12
SE	9.463E-11	5.018E-11	3.213E-11	1.717E-11	1.095E-11	8.013E-12	6.148E-12	4.874E-12	3.961E-12	3.282E-12	2.761E-12
SSE	9.949E-11	5.261E-11	3.367E-11	1.797E-11	1.145E-11	8.369E-12	6.415E-12	5.082E-12	4.128E-12	3.419E-12	2.876E-12

********** RELATIVE DEPOSITION PER UNIT AREA (M**-2) BY DOWNWIND SECTORS **********

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES .5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.430E-10	3.750E-10	2.294E-10	1.504E-10	1.031E-10	4.719E-11	1.565E-11	6.755E-12	3.918E-12	2.578E-12
SSW	6.571E-10	4.100E-10	2.419E-10	1.569E-10	1.074E-10	4.927E-11	1.643E-11	7.177E-12	4.209E-12	2.785E-12
SW	8.571E-10	5.263E-10	3.086E-10	1.998E-10	1.367E-10	6.273E-11	2.095E-11	9.166E-12	5.387E-12	3.567E-12
WSW	9.733E-10	5.096E-10	2.770E-10	1.763E-10	1.205E-10	5.541E-11	1.873E-11	8.397E-12	5.044E-12	3.376E-12
W	9.003E-10	3.982E-10	1.965E-10	1.211E-10	8.222E-11	3.814E-11	1.313E-11	6.097E-12	3.776E-12	2.562E-12
WNW	7.543E-10	3.288E-10	1.607E-10	9.876E-11	6.699E-11	3.109E-11	1.073E-11	5.000E-12	3.105E-12	2.110E-12
NW	5.477E-10	2.383E-10	1.163E-10	7.142E-11	4.849E-11	2.249E-11	7.762E-12	3.619E-12	2.246E-12	1.528E-12
NNW	2.354E-10	1.106E-10	5.671E-11	3.538E-11	2.406E-11	1.113E-11	3.805E-12	1.742E-12	1.086E-12	7.194E-13
N	5.656E-10	2.672E-10	1.466E-10	9.529E-11	6.366E-11	2.932E-11	9.899E-12	4.427E-12	2.654E-12	1.774E-12
NNE	1.589E-09	7.764E-10	4.076E-10	2.561E-10	1.744E-10	8.053E-11	2.741E-11	1.244E-11	7.560E-12	5.087E-12
NE	3.024E-09	1.443E-09	7.471E-10	4.674E-10	3.181E-10	1.470E-10	5.017E-11	2.289E-11	1.397E-11	9.415E-12
ENE	9.607E-10	5.610E-10	3.220E-10	2.073E-10	1.418E-10	6.512E-11	2.182E-11	9.614E-12	5.686E-12	3.777E-12
E	1.670E-10	1.077E-10	1.109E-10	1.390E-11	5.083E-11	2.318E-11	7.602E-12	3.207E-12	1.819E-12	1.183E-12
ESE	6.006E-10	3.276E-10	1.822E-10	1.164E-10	7.946E-11	3.657E-11	1.232E-11	5.483E-12	3.273E-12	2.184E-12
SE	1.026E-09	5.022E-10	2.636E-10	1.656E-10	1.128E-10	5.209E-11	1.773E-11	8.059E-12	4.890E-12	3.290E-12
SSE	1.057E-09	5.222E-10	2.759E-10	1.730E-10	1.183E-10	5.461E-11	1.856E-11	8.409E-12	5.099E-12	3.428E-12

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	100.00	REF. WIND HEIGHT	(METERS)	104.0
DIAMETER	(METERS)	2.44	BUILDING HEIGHT	(METERS)	0.0
EXIT VELOCITY	(METERS)	4.66	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	0.0
			HEAT EMISSION RATE	(CAL/SEC)	0.0

AT THE RELEASE HEIGHT:

VENT RELEASE MODE	WIND SPEED (METERS/SEC)			
ELEVATED	LESS THAN	0.932		
MIXED	BETWEEN	0.932	AND	4.660
GROUND LEVEL	ABOVE	4.660		

AT THE MEASURED WIND HEIGHT (104.0 METERS):

VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS			WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS		
ELEVATED	LESS THAN	0.932		LESS THAN	0.932	
MIXED	BETWEEN	0.932	AND 4.660	BETWEEN	0.932	AND 4.660
GROUND LEVEL	ABOVE	4.660		ABOVE	4.660	

EXIT THREE ELEVATED RELEASE 1/1/80-6/30/80

SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE (MILES)	DISTANCE (METERS)	X/Q (SEC/CUB.METER) NO DECAY UNDEPLETED	X/Q (SEC/CUB.METER) 2.260 DAY DECAY UNDEPLETED	X/Q (SEC/CUB.METER) 8.000 DAY DECAY DEPLETED	D/Q (PER SQ.METER)
C	SITE BOUNDARY	S	1.04	1674.	1.6E-08	1.6E-08	1.6E-08	5.1E-10
C	SITE BOUNDARY	SSW	0.96	1545.	1.6E-08	1.6E-08	1.6E-08	6.2E-10
C	SITE BOUNDARY	SW	0.89	1432.	1.7E-08	1.7E-08	1.7E-08	8.3E-10
C	SITE BOUNDARY	WSW	0.74	1191.	1.8E-08	1.8E-08	1.7E-08	1.0E-09
C	SITE BOUNDARY	W	0.69	1110.	1.9E-08	1.9E-08	1.8E-08	1.0E-09
C	SITE BOUNDARY	WNW	0.64	1030.	1.8E-08	1.8E-08	1.7E-08	9.0E-10
C	SITE BOUNDARY	NW	0.70	1127.	1.4E-08	1.4E-08	1.3E-08	6.0E-10
C	SITE BOUNDARY	NNW	0.64	1030.	6.1E-09	6.1E-09	6.0E-09	2.7E-10
C	SITE BOUNDARY	N	0.64	1030.	1.1E-08	1.1E-08	1.1E-08	5.6E-10
C	SITE BOUNDARY	NNE	0.64	1030.	3.0E-08	3.0E-08	3.0E-08	1.8E-09
C	SITE BOUNDARY	NE	0.91	1465.	4.8E-08	4.8E-08	4.7E-08	2.6E-09
C	SITE BOUNDARY	ENE	0.67	1078.	1.8E-08	1.8E-08	1.8E-08	1.0E-09
C	SITE BOUNDARY	E	0.68	1094.	3.0E-09	3.0E-09	2.9E-09	1.7E-10
C	SITE BOUNDARY	ESE	0.68	1094.	1.1E-08	1.1E-08	1.1E-08	6.4E-10
C	SITE BOUNDARY	SE	0.67	1078.	2.1E-08	2.1E-08	2.1E-08	1.1E-09
C	SITE BOUNDARY	SSE	0.74	1191.	2.7E-08	2.7E-08	2.6E-08	1.1E-09
C	MILK COW	SSE	0.79	1271.	2.7E-08	2.7E-08	2.6E-08	1.0E-09
C	MEAT ANIMAL	SW	1.70	2736.	2.2E-08	2.2E-08	2.1E-08	4.6E-10
C	MEAT ANIMAL	W	1.08	1738.	1.6E-08	1.6E-08	1.5E-08	6.2E-10
C	MEAT ANIMAL	NNE	1.10	1770.	2.9E-08	2.9E-08	2.9E-08	1.1E-09
C	MEAT ANIMAL	SE	0.79	1271.	2.1E-08	2.1E-08	2.1E-08	1.0E-09
C	MEAT ANIMAL	SSE	0.80	1287.	2.7E-08	2.7E-08	2.6E-08	1.0E-09
C	RESIDENCE	S	1.48	2382.	1.9E-08	1.9E-08	1.8E-08	3.9E-10
C	RESIDENCE	SSW	1.44	2317.	2.0E-08	2.0E-08	1.9E-08	4.3E-10
C	RESIDENCE	SW	0.89	1432.	1.7E-08	1.7E-08	1.7E-08	8.3E-10
C	RESIDENCE	WSW	1.00	1609.	1.9E-08	1.9E-08	1.9E-08	8.1E-10
C	RESIDENCE	W	0.87	1400.	1.7E-08	1.7E-08	1.7E-08	8.0E-10
C	RESIDENCE	WNW	0.79	1271.	1.5E-08	1.5E-08	1.5E-08	7.3E-10
C	RESIDENCE	NW	0.80	1287.	1.3E-08	1.3E-08	1.3E-08	5.3E-10
C	RESIDENCE	NNW	0.85	1368.	6.1E-09	6.1E-09	5.9E-09	2.2E-10
C	RESIDENCE	N	0.88	1416.	1.1E-08	1.1E-08	1.1E-08	4.7E-10
C	RESIDENCE	NNE	0.91	1465.	3.0E-08	3.0E-08	2.9E-08	1.4E-09
C	RESIDENCE	NE	2.24	3605.	4.0E-08	4.0E-08	3.9E-08	8.6E-10
C	RESIDENCE	E	0.94	1513.	7.0E-09	7.0E-09	6.9E-09	2.2E-10
C	RESIDENCE	SE	0.82	1320.	2.1E-08	2.1E-08	2.1E-08	9.8E-10
C	RESIDENCE	SSE	0.79	1271.	2.7E-08	2.7E-08	2.6E-08	1.0E-09
C	GARDEN	S	1.57	2527.	1.9E-08	1.9E-08	1.8E-08	3.7E-10
C	GARDEN	SSW	1.44	2317.	2.0E-08	2.0E-08	1.9E-08	4.3E-10
C	GARDEN	SW	1.04	1674.	1.9E-08	1.9E-08	1.8E-08	7.5E-10
C	GARDEN	WSW	1.00	1609.	1.9E-08	1.9E-08	1.9E-08	8.1E-10
C	GARDEN	W	0.87	1400.	1.7E-08	1.7E-08	1.7E-08	8.0E-10
C	GARDEN	WNW	0.81	1304.	1.5E-08	1.5E-08	1.5E-08	7.2E-10
C	GARDEN	NW	5.00	8047.	5.3E-09	5.3E-09	5.1E-09	4.1E-11
C	GARDEN	NNW	0.97	1561.	6.2E-09	6.2E-09	6.0E-09	1.9E-10
C	GARDEN	N	0.85	1368.	1.1E-08	1.1E-08	1.1E-08	4.8E-10
C	GARDEN	NNE	1.39	2237.	2.9E-08	2.9E-08	2.8E-08	8.4E-10
C	GARDEN	SE	0.94	1513.	2.1E-08	2.1E-08	2.1E-08	8.8E-10

VENT AND BUILDING PARAMETERS:

RELEASE HEIGHT	(METERS)	100.00	REF. WIND HEIGHT	(METERS)	104.0
DIAMETER	(METERS)	2.44	BUILDING HEIGHT	(METERS)	0.0
EXIT VELOCITY	(METERS)	4.66	BLDG.MIN.CRS.SEC.AREA	(SQ.METERS)	0.0
			HEAT EMISSION RATE	(CAL/SEC)	0.0

AT THE RELEASE HEIGHT:				AT THE MEASURED WIND HEIGHT (10.0 METERS):					
VENT RELEASE MODE	WIND SPEED (METERS/SEC)			VENT RELEASE MODE	WIND SPEED (METERS/SEC) STABLE CONDITIONS			WIND SPEED (METERS/SEC) UNSTABLE/NEUTRAL CONDITIONS	
ELEVATED	LESS THAN	0.932		ELEVATED	LESS THAN	0.932		LESS THAN	0.932
MIXED	BETWEEN	0.932 AND	4.660	MIXED	BETWEEN	0.932 AND	4.660	BETWEEN	0.932 AND 4.660
GROUND LEVEL	ABOVE	4.660		GROUND LEVEL	ABOVE	4.660		ABOVE	4.660

ENCLOSURE 5

METEOROLOGICAL DATA FOR
DIFFUSION ANALYSIS
JANUARY 1 - JUNE 30, 1980
BRUNSWICK STEAM ELECTRIC PLANT

The wind frequency tables present the number of hourly coubinations of wind direction, wind speed, and stability for the upper (100 meter) and lower (10 meter) sensor elevations.

Pertinent information available from the tables is as follows:

1. Stability

Percent occurrence Pasquill categories:

A	B	C	D	E	F	G
3.6	6.4	7.7	34.4	29.1	11.9	6.9

2. Wind Speed

	10 Meter	100 Meter
Average Speed (mph)	9.0	16.3
Percent Calm	0.4	0.0
Percent Less than 3.5 mph	13.1	0.7

3. Wind Direction

	10 Meter	100 Meter
Prevailing Direction	SW	SW
Percent Occurrence	18.6	16.2

4. Data Recovery

	10 Meter	100 Meter
Percent Good Hours	98.7	96.1

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS A
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.	0.	0.	0.	2.	0.	0.	2.	17.1
NNE	0.	0.	0.	1.	3.	0.	0.	4.	14.4
NE	0.	0.	0.	2.	4.	2.	0.	8.	15.7
ENE	0.	0.	0.	1.	10.	4.	0.	15.	16.8
E	0.	0.	1.	5.	15.	0.	0.	21.	13.3
ESE	0.	0.	1.	11.	7.	0.	0.	19.	11.4
SE	0.	0.	2.	4.	1.	2.	0.	9.	11.9
SSE	0.	0.	0.	3.	0.	1.	0.	4.	11.9
S	0.	0.	0.	2.	1.	0.	0.	3.	13.6
SSW	0.	0.	0.	0.	10.	2.	0.	12.	16.7
SW	0.	0.	0.	0.	14.	9.	4.	27.	20.6
WSW	0.	0.	0.	0.	2.	1.	2.	5.	21.9
W	0.	0.	0.	0.	0.	0.	0.	0.	0.0
WNW	0.	0.	0.	0.	0.	3.	0.	3.	19.6
NW	0.	0.	0.	0.	4.	3.	3.	10.	21.0
NNW	0.	0.	0.	0.	0.	1.	1.	2.	24.3
TOTAL	0.	0.	4.	29.	73.	28.	10.	144.	16.7

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 32

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS B
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-#2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.	0.	1.	2.	3.	0.	0.	6.	12.3
NNE	0.	0.	0.	3.	4.	0.	0.	7.	12.6
NE	0.	0.	1.	2.	4.	1.	3.	11.	17.2
ENE	0.	0.	0.	3.	7.	3.	0.	13.	16.1
E	0.	0.	2.	10.	7.	0.	0.	19.	11.6
ESE	0.	0.	0.	12.	3.	0.	0.	15.	10.6
SE	0.	0.	1.	4.	2.	1.	0.	8.	11.8
SSE	0.	0.	0.	2.	1.	0.	0.	3.	11.2
S	0.	0.	0.	8.	2.	1.	0.	11.	12.4
SSW	0.	0.	0.	4.	20.	9.	0.	33.	16.2
SW	0.	0.	0.	5.	35.	25.	15.	80.	19.8
WSW	0.	0.	0.	5.	4.	3.	2.	14.	16.7
W	0.	0.	0.	0.	0.	0.	0.	0.	0.0
WNW	0.	0.	1.	0.	1.	7.	1.	10.	20.5
NW	0.	0.	2.	2.	7.	3.	2.	16.	16.3
NNW	0.	0.	1.	7.	8.	4.	1.	21.	15.0
TOTAL	0.	0.	9.	69.	108.	57.	24.	267.	14.7

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 7

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS C
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.	0.	2.	4.	3.	2.	0.	11.	13.2
NNE	0.	0.	0.	5.	11.	0.	0.	16.	14.5
NE	0.	0.	1.	3.	8.	4.	1.	17.	15.7
ENE	0.	0.	2.	7.	8.	4.	0.	21.	14.2
E	0.	0.	2.	5.	5.	0.	0.	12.	11.6
ESE	0.	0.	2.	7.	1.	0.	0.	10.	8.6
SE	0.	0.	3.	7.	4.	1.	0.	15.	11.3
SSE	0.	0.	3.	3.	0.	0.	0.	6.	8.3
S	0.	0.	1.	2.	4.	4.	0.	11.	16.1
SSW	0.	0.	0.	13.	13.	14.	0.	40.	16.6
SW	0.	0.	0.	11.	23.	16.	8.	58.	18.1
WSW	0.	0.	2.	6.	7.	7.	2.	24.	16.0
W	0.	0.	0.	1.	2.	0.	0.	3.	12.3
WNW	0.	0.	0.	3.	6.	6.	1.	16.	17.1
NW	0.	0.	3.	11.	5.	7.	3.	29.	15.6
NNW	0.	0.	5.	14.	14.	0.	0.	33.	11.7
TOTAL	0.	0.	26.	102.	114.	65.	15.	322.	13.8

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 9

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS D
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	CALM	SPEED CLASS(MPH) 0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.	0.	5.	33.	41.	32.	1.	112.	15.0
NNE	0.	0.	6.	27.	61.	15.	0.	109.	14.6
NE	0.	2.	6.	8.	50.	51.	20.	137.	19.0
ENE	0.	0.	9.	25.	36.	26.	6.	102.	15.7
E	0.	0.	3.	13.	29.	5.	0.	50.	13.8
ESE	0.	0.	5.	16.	8.	10.	0.	39.	13.2
SE	0.	0.	5.	4.	13.	6.	0.	28.	14.3
SSE	0.	0.	2.	7.	4.	0.	4.	17.	14.9
S	0.	1.	3.	19.	6.	9.	17.	55.	18.2
SSW	0.	0.	2.	34.	43.	41.	13.	133.	17.2
SW	0.	0.	4.	27.	52.	103.	46.	232.	20.0
WSW	0.	0.	8.	29.	42.	39.	18.	136.	16.9
W	0.	1.	9.	37.	11.	1.	3.	62.	11.3
WNW	0.	0.	7.	16.	24.	13.	11.	71.	17.1
NW	0.	0.	4.	18.	45.	15.	4.	86.	15.4
NNW	0.	1.	7.	24.	43.	17.	0.	92.	14.1
TOTAL	0.	5.	85.	337.	508.	383.	143.	1461.	15.7

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 42

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS E
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.	1.	0.	6.	20.	13.	0.	40.	16.4
NNE	0.	0.	1.	8.	36.	18.	0.	63.	16.4
NE	0.	1.	1.	8.	37.	28.	6.	81.	17.7
ENE	0.	0.	2.	7.	25.	25.	1.	60.	17.5
E	0.	1.	2.	12.	38.	0.	2.	55.	14.2
ESE	0.	0.	0.	10.	15.	5.	1.	31.	15.1
SE	0.	0.	1.	4.	18.	17.	6.	46.	18.7
SSE	0.	1.	2.	5.	11.	19.	15.	53.	20.4
S	0.	2.	3.	7.	8.	15.	33.	68.	23.4
SSW	0.	0.	4.	12.	46.	15.	19.	96.	18.6
SW	0.	0.	4.	19.	60.	104.	38.	225.	20.1
WSW	0.	0.	2.	19.	58.	57.	25.	161.	19.1
W	0.	1.	6.	15.	20.	6.	1.	49.	13.0
WNW	0.	1.	1.	6.	11.	16.	1.	36.	17.2
NW	0.	0.	1.	8.	31.	17.	0.	57.	16.1
NNW	0.	0.	2.	13.	29.	25.	0.	69.	16.3
TOTAL	0.	8.	32.	159.	463.	380.	148.	1190.	17.5

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 62

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS F
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.	1.	1.	1.	11.	9.	0.	23.	16.4
NNE	0.	0.	1.	7.	17.	14.	0.	39.	16.4
NE	0.	0.	2.	1.	31.	10.	0.	44.	16.3
ENE	0.	0.	2.	13.	9.	0.	0.	24.	11.0
E	0.	1.	3.	6.	14.	0.	0.	24.	12.4
ESE	0.	0.	1.	4.	2.	0.	0.	7.	11.6
SE	0.	0.	1.	7.	7.	1.	0.	16.	12.5
SSE	0.	1.	3.	11.	6.	9.	0.	30.	13.4
S	0.	0.	1.	7.	5.	3.	0.	16.	13.3
SSW	0.	0.	2.	12.	10.	4.	0.	28.	12.9
SW	0.	0.	0.	9.	17.	8.	2.	36.	16.2
WSW	0.	0.	2.	18.	24.	13.	2.	59.	15.1
W	0.	0.	6.	21.	24.	5.	0.	56.	13.0
WNW	0.	0.	1.	4.	13.	9.	3.	30.	17.5
NW	0.	1.	1.	3.	10.	15.	0.	30.	17.3
NNW	0.	0.	0.	3.	11.	20.	0.	34.	18.1
TOTAL	0.	4.	27.	127.	211.	120.	7.	496.	14.6

NUMBER OF CALMS = 0
NUMBER OF BAD HOURS = 13

JOINT OCCURRENCE FREQUENCY OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS G
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.	0.	5.	10.	10.	4.	0.	29.	12.2
NNE	0.	2.	0.	12.	5.	1.	0.	20.	11.2
NE	0.	1.	3.	16.	8.	2.	0.	30.	11.1
ENE	0.	1.	1.	9.	7.	0.	0.	18.	11.3
E	0.	1.	3.	9.	3.	0.	0.	16.	9.8
ESE	0.	0.	7.	3.	2.	0.	0.	12.	8.5
SE	0.	0.	2.	5.	3.	0.	0.	10.	9.8
SSE	0.	0.	3.	12.	1.	0.	0.	16.	9.3
S	0.	0.	2.	3.	1.	0.	0.	6.	9.8
SSW	0.	0.	4.	6.	7.	1.	0.	18.	11.4
SW	0.	1.	4.	3.	6.	3.	0.	17.	12.4
WSW	0.	1.	2.	12.	2.	0.	0.	17.	10.0
W	0.	2.	3.	10.	6.	3.	1.	25.	12.1
WNW	0.	2.	2.	2.	10.	7.	2.	25.	16.3
NW	1.	2.	2.	3.	3.	5.	0.	16.	13.0
NNW	0.	0.	5.	6.	5.	4.	0.	20.	12.2
TOTAL	1.	13.	48.	121.	79.	30.	3.	295.	11.3

NUMBER OF CALMS - 1
NUMBER OF BAD HOURS - 4

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 6/30/80

SUMMARY
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

UPPER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.	2.	14.	56.	90.	60.	1.	223.	14.9
NNE	0.	2.	8.	63.	137.	48.	0.	258.	15.0
NE	0.	4.	14.	40.	142.	98.	30.	328.	17.3
ENE	0.	1.	16.	65.	102.	62.	7.	253.	15.3
E	0.	3.	16.	60.	111.	5.	2.	197.	13.0
ESE	0.	0.	16.	63.	38.	15.	1.	133.	12.2
SE	0.	0.	15.	35.	48.	28.	6.	132.	14.6
SSE	0.	2.	13.	43.	23.	29.	19.	129.	15.6
S	0.	3.	10.	48.	27.	32.	50.	170.	18.9
SSW	0.	0.	12.	81.	149.	86.	32.	360.	16.8
SW	0.	1.	12.	74.	207.	268.	113.	675.	19.5
WSW	0.	1.	16.	89.	139.	120.	51.	416.	17.2
W	0.	4.	24.	84.	63.	15.	5.	195.	12.3
WNW	0.	3.	12.	31.	65.	61.	19.	191.	17.3
NW	1.	3.	13.	45.	105.	65.	12.	244.	16.0
NNW	0.	1.	20.	67.	110.	71.	2.	271.	14.9
TOTAL	1.	30.	231.	944.	1556.	1063.	350.	4175.	16.3

NUMBER OF CALMS - 1
NUMBER OF BAD HOURS - 169

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS A
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-#2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	CALM	SPEED CLASS(MPH) 0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.	0.	0.	0.	1.	0.	0.	1.	12.5
NNE	0.	0.	1.	5.	0.	0.	0.	6.	10.4
NE	0.	0.	0.	3.	11.	0.	0.	14.	13.2
ENE	0.	0.	0.	5.	7.	0.	0.	12.	12.9
E	0.	0.	1.	16.	3.	0.	0.	20.	10.6
ESE	0.	0.	2.	14.	1.	0.	0.	17.	9.0
SE	0.	0.	1.	8.	2.	0.	0.	11.	9.5
SSE	0.	0.	0.	2.	0.	0.	0.	2.	8.9
S	0.	0.	0.	1.	0.	0.	0.	1.	10.1
SSW	0.	0.	0.	2.	11.	0.	0.	13.	14.0
SW	0.	0.	0.	0.	16.	14.	0.	30.	17.7
WSW	0.	0.	0.	1.	1.	0.	0.	2.	14.3
W	0.	0.	0.	0.	0.	0.	0.	0.	0.0
WNW	0.	0.	0.	0.	4.	2.	0.	6.	15.8
NW	0.	0.	0.	5.	8.	0.	0.	13.	13.0
NNW	0.	0.	0.	2.	5.	0.	0.	7.	13.5
TOTAL	0.	0.	5.	64.	70.	15.	0.	155.	12.4

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 21

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS B
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.	0.	2.	6.	0.	0.	0.	8.	8.4
NNE	0.	0.	2.	4.	0.	0.	0.	6.	9.8
NE	0.	0.	2.	3.	6.	1.	0.	12.	12.6
ENE	0.	0.	1.	4.	7.	1.	0.	13.	13.1
E	0.	0.	5.	15.	2.	0.	0.	22.	8.9
ESE	0.	0.	2.	11.	0.	0.	0.	13.	8.5
SE	0.	0.	4.	5.	1.	0.	0.	10.	8.6
SSE	0.	0.	1.	1.	0.	0.	0.	2.	7.9
S	0.	0.	0.	8.	2.	0.	0.	10.	10.9
SSW	0.	0.	0.	7.	23.	0.	0.	30.	14.1
SW	0.	0.	1.	26.	45.	24.	1.	87.	16.3
WSW	0.	0.	1.	3.	6.	0.	0.	10.	12.9
W	0.	0.	0.	0.	0.	0.	0.	0.	0.0
WNW	0.	0.	2.	1.	9.	1.	0.	13.	13.9
NW	0.	0.	2.	8.	6.	0.	0.	16.	11.8
NNW	0.	0.	5.	12.	4.	1.	0.	22.	10.5
TOTAL	0.	0.	30.	104.	111.	28.	1.	274.	11.2

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 0

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS C
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-#2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.	2.	1.	4.	3.	0.	0.	10.	8.4
NNE	0.	1.	1.	13.	2.	0.	0.	17.	10.0
NE	0.	0.	4.	7.	12.	0.	0.	23.	11.7
ENE	0.	0.	3.	11.	5.	0.	0.	19.	10.6
E	0.	0.	2.	7.	1.	0.	0.	10.	9.7
ESE	0.	0.	6.	1.	0.	0.	0.	7.	6.4
SE	0.	0.	8.	11.	1.	0.	0.	20.	8.0
SSE	0.	0.	3.	2.	0.	0.	0.	5.	7.2
S	0.	0.	0.	5.	6.	0.	0.	11.	13.5
SSW	0.	0.	0.	12.	20.	3.	0.	35.	14.3
SW	0.	0.	2.	21.	41.	9.	0.	73.	14.6
WSW	0.	0.	1.	6.	7.	1.	0.	15.	13.0
W	0.	0.	3.	2.	1.	0.	0.	6.	9.2
WNW	0.	0.	2.	5.	9.	0.	0.	16.	12.1
NW	0.	0.	10.	15.	8.	1.	1.	35.	10.3
NNW	0.	2.	11.	15.	1.	0.	0.	29.	8.1
TOTAL	0.	5.	57.	137.	117.	14.	1.	331.	10.5

NUMBER OF CALMS - 0
NUMBER OF BAD HOURS - 0

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:60 PM 6/30/80

STABILITY CLASS D
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.	2.	36.	70.	11.	0.	0.	119.	8.9
NNE	0.	5.	19.	68.	16.	0.	0.	108.	9.4
NE	0.	8.	16.	61.	42.	13.	0.	140.	11.8
ENE	0.	6.	15.	39.	24.	1.	0.	85.	10.0
E	0.	1.	19.	26.	3.	0.	0.	49.	8.6
ESE	0.	1.	16.	19.	4.	0.	0.	40.	8.3
SE	0.	0.	13.	18.	0.	0.	0.	31.	8.1
SSE	0.	0.	8.	3.	8.	0.	0.	19.	10.3
S	0.	0.	15.	18.	21.	7.	0.	61.	11.6
SSW	0.	2.	7.	59.	57.	6.	1.	132.	12.6
SW	0.	0.	14.	89.	127.	20.	1.	251.	13.4
WSW	0.	3.	25.	57.	34.	6.	0.	125.	11.0
W	0.	4.	30.	28.	3.	3.	0.	68.	8.3
WNW	1.	11.	23.	18.	12.	6.	0.	71.	9.2
NW	0.	5.	26.	60.	9.	0.	0.	100.	8.9
NNW	0.	2.	27.	39.	9.	0.	0	77.	8.8
TOTAL	1.	50.	309.	672.	380.	62.	2.	1476.	9.9

NUMBER OF CALMS - 1
NUMBER OF BAD HOURS - 27

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS E
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.	5.	36.	8.	0.	0.	0.	49.	5.9
NNE	1.	8.	35.	16.	3.	0.	0.	63.	6.6
NE	2.	16.	29.	23.	8.	0.	0.	78.	7.3
ENE	0.	3.	28.	33.	12.	0.	0.	76.	8.6
E	0.	3.	10.	13.	0.	0.	0.	26.	6.8
ESE	0.	1.	22.	9.	2.	0.	0.	34.	7.0
SE	0.	6.	18.	28.	1.	0.	0.	53.	7.5
SSE	0.	2.	12.	18.	14.	0.	0.	46.	9.8
S	0.	2.	12.	14.	20.	11.	0.	59.	12.5
SSW	0.	7.	19.	42.	15.	6.	2.	91.	10.4
SW	1.	10.	67.	121.	76.	6.	1.	282.	10.4
WSW	1.	15.	48.	59.	16.	0.	0.	139.	8.2
W	1.	13.	33.	8.	1.	0.	0.	56.	5.3
WNW	1.	11.	35.	13.	0.	0.	0.	60.	5.6
NW	1.	14.	43.	19.	0.	0.	0.	77.	5.7
NNW	0.	7.	42.	8.	0.	0.	0.	57.	5.7
TOTAL	8.	123.	489.	432.	168.	23.	3.	1246.	7.7

NUMBER OF CALMS - 8
NUMBER OF BAD HOURS - 5

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS F
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1+2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	0.	18.	24.	1.	0.	0.	0.	43.	4.2
NNE	0.	18.	28.	1.	0.	0.	0.	47.	3.8
NE	0.	12.	10.	0.	0.	0.	0.	22.	3.5
ENE	0.	8.	12.	0.	0.	0.	0.	20.	4.2
E	0.	2.	5.	0.	0.	0.	0.	7.	4.1
ESE	0.	9.	6.	0.	0.	0.	0.	15.	3.2
SE	0.	1.	11.	1.	0.	0.	0.	13.	5.5
SSE	0.	0.	1.	0.	0.	0.	0.	1.	7.2
S	0.	10.	4.	1.	0.	0.	0.	15.	3.9
SSW	0.	9.	2.	1.	0.	0.	0.	12.	3.5
SW	0.	10.	42.	12.	0.	0.	0.	64.	5.7
WSW	1.	20.	45.	12.	0.	0.	0.	78.	5.0
W	0.	18.	33.	1.	0.	0.	0.	52.	4.0
WNW	0.	11.	21.	1.	0.	0.	0.	33.	4.4
NW	0.	15.	27.	0.	0.	0.	0.	42.	3.9
NNW	0.	9.	36.	0.	0.	0.	0.	45.	4.3
TOTAL	1.	170.	307.	31.	0.	0.	0.	509.	4.4

NUMBER OF CALMS - 1
NUMBER OF BAD HOURS - 0

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 6/30/80

STABILITY CLASS G
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-#2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	2.	23.	6.	0.	0.	0.	0.	31.	2.7
NNE	1.	15.	6.	0.	0.	0.	0.	22.	2.9
NE	0.	5.	1.	0.	0.	0.	0.	6.	2.4
ENE	0.	4.	0.	0.	0.	0.	0.	4.	2.0
E	0.	3.	1.	0.	0.	0.	0.	4.	2.0
ESE	0.	3.	0.	0.	0.	0.	0.	3.	2.4
SE	0.	2.	0.	0.	0.	0.	0.	2.	1.7
SSE	0.	1.	0.	0.	0.	0.	0.	1.	1.4
S	0.	3.	0.	0.	0.	0.	0.	3.	1.2
SSW	0.	6.	3.	0.	0.	0.	0.	9.	3.1
SW	0.	8.	3.	0.	0.	0.	0.	11.	2.7
WSW	0.	13.	17.	0.	0.	0.	0.	30.	3.6
W	1.	16.	4.	0.	0.	0.	0.	21.	2.6
WNW	1.	19.	14.	0.	0.	0.	0.	34.	3.4
NW	2.	38.	20.	0.	0.	0.	0.	60.	3.2
NNW	2.	36.	18.	0.	0.	0.	0.	56.	3.3
TOTAL	9.	195.	93.	0.	0.	0.	0.	297.	2.5

NUMBER OF CALMS - 9
NUMBER OF BAD HOURS - 2

JOINT OCCURRENCE FREQUENCIES OF WIND DIRECTION AND SPEED
FOR THE PERIOD 12:00 AM 1/ 1/80 TO 11:00 PM 6/30/80

SUMMARY
STABILITY CALCULATED FROM DIFF. TEMPERATURE #1-2

BRUNSWICK ON-SITE METEOROLOGICAL FACILITY

LOWER WIND DIRECTION	SPEED CLASS(MPH) CALM	0.75- 3.5	3.5- 7.5	7.5-12.5	12.5-18.5	18.5-25.0	GREATER THAN 25.0	TOTAL	AVG. WIND SPEED
N	2.	50.	105.	89.	15.	0.	0.	261.	6.8
NNE	2.	47.	92.	107.	21.	0.	0.	269.	7.3
NE	2.	41.	62.	97.	79.	14.	0.	295.	9.9
ENE	3.	21.	59.	92.	55.	2.	0.	229.	9.3
E	3.	9.	43.	77.	9.	0.	0.	138.	8.3
ESE	0.	14.	54.	54.	7.	0.	0.	129.	7.3
SE	3.	9.	55.	71.	5.	0.	0.	140.	7.7
SSE	0.	3.	25.	26.	22.	0.	0.	76.	9.5
S	0.	15.	31.	47.	49.	18.	0.	160.	11.1
SSW	0.	24.	31.	123.	126.	15.	3.	322.	11.8
SW	1.	28.	129.	259.	305.	73.	3.	798.	12.2
WSW	2.	51.	137.	138.	64.	7.	0.	399.	8.4
W	2.	51.	103.	39.	5.	3.	0.	203.	5.8
WNW	3.	52.	97.	38.	34.	9.	0.	233.	7.4
NW	3.	72.	128.	107.	31.	1.	1.	343.	7.0
NNW	2.	56.	139.	76.	19.	1.	0.	293.	6.7
TOTAL	19.	563.	1290.	1440.	846.	143.	7.	4288.	9.0

NUMBER OF CALMS - 19
NUMBER OF BAD HOURS - 56

ATTACHMENT 3

ENVIRONMENTAL TECHNICAL SPECIFICATIONS CHANGES

January - June, 1980

Brunswick Steam Electric Plant

ATTACHMENT #3

There were no changes.

ATTACHMENT 4

OCEAN OUTFALL THERMAL MONITORING DATA

January - June, 1980

Brunswick Steam Electric Plant

ATTACHMENT 4

No thermal monitoring was conducted during the period January-June 1980.

ATTACHMENT 5

MAINTENANCE DREDGING IN INTAKE CANAL

January - June, 1980

Brunswick Steam Electric Plant

ATTACHMENT 5

No maintenance dredging was performed in the intake canal or discharge canal during the period January-June 1980.

ATTACHMENT 6

Milk Usage Survey

January - June 1980

Brunswick Steam Electric Plant

ATTACHMENT 6

Surveys were conducted at Environmental Sampling Station No. 35 on 1/21/80 and 6/30/80, in accordance with Environmental Technical Specification 4.2.7. The survey conducted on 1/21/80 indicated no infant, child, or teen consumption of cow's milk at this location.

The survey conducted on 6/30/80 indicated that a five year old child was consuming cow's milk on a regular (daily) basis. Further investigation indicated that this child consumption began approximately one month prior to the survey date. On July 9, 1980, a discussion was held between two CP&L environmental monitoring personnel and residents of the dairy farm. The CP&L personnel were told that, henceforth, the child would no longer consume milk produced by this cow.

The NRC was made aware of the survey results and followup action in a phone conversation between CP&L (Brunswick Plant) representatives and members of the NRC Region II office on July 11, 1980.