



Portland General Electric Company

Charles Goodwin, Jr. Assistant Vice President

3

AUGUST 28, 1980

Trojan Nuclear Plant
Docket 50-366
License NPP-1

Mr. R. M. Engelken, Director
U. S. Nuclear Regulatory Commission
Region V
Suite 202, Walnut Creek Plaza
1990 N. California Blvd.
Walnut Creek, CA 94596

Dear Sir:

In accordance with the Trojan Nuclear Plant Environmental Technical Specifications, attached is the semiannual radioactive effluent and waste disposal report for the period January 1, 1980 to June 30, 1980. This information will also be included in the 1980 annual operating report.

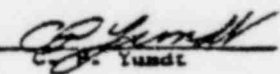
Sincerely,

C. Goodwin, Jr.
Assistant Vice President
Thermal Plant Operation and
Maintenance

CG/TDW/GRC/48a385
Attachment

cc: Mr. Lynn Frank, Director
State of Oregon
Department of Energy

Mr. Robert A. Clark, Chief
Operating Reactors Branch No. 3
Division of Licensing
U. S. Nuclear Regulatory Commission



J. W. Lentzsch

8009030579

A. EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

This section contains a summary of the liquid and gaseous release limits; a listing of the maximum permissible concentrations of the isotopes released; a summary of batch and abnormal release data; a summary of total liquid and gaseous releases; listings of isotopes released classified by pathway, gaseous or liquid, and type, continuous or batch; and a summary of solid radioactive waste and irradiated fuel shipments. The data presented in this section represent all releases during the period January 1, 1980 through June 30, 1980.

PORTLAND GENERAL ELECTRIC COMPANY
 TROJAN NUCLEAR PLANT
 LICENSE NO. NPF-1
EFFLUENT AND WASTE DISPOSAL REPORT

PART A-1
SUPPLEMENTAL INFORMATION
 TABLE 1
 January 1, 1980 through June 30, 1980

REGULATORY LIMITS

<u>Fission and Activation Gas Release Rate Limits</u>	<u>Unit</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>
1. ETS 7.4.5.a.(1), Instantaneous			
$Q_{TV} \leq \frac{1}{2.0 N_V}$	Ci/Sec	1.98E-1	2.03E-1
$Q_{TV} \leq \frac{1}{0.33 (L_V + 1.1 N_V)}$	Ci/Sec	3.13E-1	2.86E-1
2. ETS 2.4.5.b.(1), Quarterly Average			
$Q_{TV} \leq \frac{1}{13 N_V}$	Ci/Sec	2.52E-2	2.62E-2
$Q_{TV} \leq \frac{1}{6.3 M_V}$	Ci/Sec	9.98E-3	9.45E-3
3. ETS 7.4.5.b.(2), Twelve Month Average			
$Q_{TV} \leq \frac{1}{25 N_V}$	Ci/Sec	1.43E-2	1.37E-2
$Q_{TV} \leq \frac{1}{13 M_V}$	Ci/Sec	5.03E-3	4.90E-3

PORTLAND GENERAL ELECTRIC COMPANY
TROJAN NUCLEAR PLANT
LICENSE NO. NPF-1
EFFLUENT AND WASTE DISPOSAL REPORT

PART A-2
SUPPLEMENTAL INFORMATION
TABLE II

January 1, 1980 through June 30, 1980

REGULATORY LIMITS

Gaseous Iodine Release Limit

1. ETS 2.4.5.b.(5), Iodine 131 limit of 2.0 Ci during any calendar year.
2. ETS 2.4.5.b.(6), Iodine 131 limit of 4.0 Ci during any consecutive twelve month period.

Particulate Release Limit (For Nuclides with Half Lives Greater than Eight Days)

1. ETS 2.4.5.a.(2), Instantaneous release rate of 1.24×10^{-6} Ci/Sec.
2. ETS 2.4.5.b.(3), Quarterly average release rate limit of 3.21×10^{-8} Ci/Sec.
3. ETS 2.4.5.b.(4), Twelve month average release rate limit of 1.67×10^{-8} Ci/Sec.

Liquid Effluent Limits (Excluding Tritium and Gases)

1. ETS 2.4.2.a, Instantaneous discharge concentrations less than the maximum permissible concentrations listed in 10 CFR 20, Appendix B, Table II, Column 2.
2. ETS 2.4.2.b, Gross release limit of 10 Ci in a quarter.
3. ETS 2.4.2.c, Gross release limit of 20 Ci in any consecutive twelve month period.

PORTLAND GENERAL ELECTRIC COMPANY
 TROJAN NUCLEAR PLANT
 LICENSE NO. NPF-1
EFFLUENT AND WASTE DISPOSAL REPORT

PART A-3
SUPPLEMENTAL INFORMATION
 TABLE III

January 1, 1980 through June 30, 1980

MAXIMUM PERMISSIBLE CONCENTRATIONS

<u>LIQUID</u>			
<u>ISOTOPE</u>	<u>MPC (uCi/cc)</u>	<u>ISOTOPE</u>	<u>MPC (uCi/cc)</u>
Isotope			
Sodium-24	3X10-5	Cesium-136	9X10-5
Chromium-51	2X10-3	Cesium-137	2X10-5
Manganese-54	1X10-4	Barium-140	2X10-5
Cobalt-57	4X10-4	Lathanum-140	2X10-5
Cobalt-58	9X10-5	Cerium-141	9X10-5
Iron-59	5X10-5	Cerium-144	1X10-5
Cobalt-60	3X10-5	Neptunium-139	1X10-4
Rubidium-88	3X10-6		
Strontium-89	3X10-6		
Strontium-90	3X10-7		
Niobium-95	1X10-4	Alpha	3X10-8
Zirconium-95	6X10-5	Tritium	3X10-3
Molybdenum-99	4X10-5	Xenon-133,135,133M	4X10-5
Technetium-99M	3X10-3	Krypton-85M	4X10-5
Ruthenium-103	8X10-5		
Silver-110M	3X10-5		
Tin-113	8X10-5		
Antimony-124	2X10-5		
Antimony-125	1X10-4		
Iodine-131	3X10-7		
Iodine-132	8X10-4		
Tellurium-132	2X10-5		
Iodine-133	1X10-6		
Cesium-134	9X10-6		
Iodine-134	2X10-5		
Iodine-135	4X10-6		

Gaseous

Gaseous MPC's are not used in calculating technical specifications at Trojan.

PORTLAND GENERAL ELECTRIC COMPANY
TROJAN NUCLEAR PLANT
LICENSE NO. NPF-1
EFFLUENT AND WASTE DISPOSAL REPORT

PART A-4
SUPPLEMENTAL INFORMATION
TABLE IV

January 1, 1980 through June 30, 1980

AVERAGE ENERGY

Effluent release limits are not based upon \bar{E} , hence, reporting \bar{E} is not required.

MEASUREMENTS AND APPROXIMATIONS OF TOTAL RADIOACTIVITY

Gaseous Releases

Fission and Activation Gases: Gamma spectrometric analysis of gaseous grab samples define radionuclide distribution at least monthly on monitored gaseous release points. Using the known nuclide distributions and process radiation monitor readings, the actual quantities of gaseous releases are calculated.

Iodines: Weekly composite filter and activated charcoal samples are analyzed by gamma spectroscopy to determine the concentrations of iodine isotopes released from each effluent stream. Monthly composite filters and activated charcoal samples are also analyzed.

Particulates: Weekly composite filter samples are analyzed by gamma spectroscopy to determine the concentrations of particulate isotopes. Monthly composite samples are analyzed for beta and alpha emitting isotopes by counting with a gas flow proportional counter using chemical separation techniques when necessary.

Tritium: Tritium is collected on dry silica gel in monthly composite samples, and counted using liquid scintillation spectroscopy.

Liquid Releases

Fission and Activation Products: Gamma spectrometric analysis of each batch is performed. Monthly composite samples are maintained for continuous and batch releases and the composites are analyzed for specific nuclides as required.

Tritium: Monthly composite samples are distilled and deionized as necessary to remove contamination and counted by liquid scintillation techniques.

Dissolved and Entrained Gases: Gaseous isotopes are determined by gamma spectrometric analysis of each batch. Monthly composite samples are also analyzed for gaseous isotopes.

PORTLAND GENERAL ELECTRIC COMPANY
 TROJAN NUCLEAR PLANT
 LICENSE NO. NPF-1
EFFLUENT AND WASTE DISPOSAL REPORT

PART A-5
SUPPLEMENTAL INFORMATION
 TABLE V

January 1, 1980 through June 30, 1980

<u>BATCH RELEASES</u>	<u>Unit</u>	<u>Liquid</u>	<u>Gaseous</u>
Number of Batch Releases		106	26
Total time period for Batch Releases	Hours	361.62	1795.47
Maximum time period for Batch Releases	Hours	19.25	1052.70
Average time period for Batch Releases	Hours	3.41	69.06
Minimum time period for Batch Releases	Hours	0.17	0.28
Average dilution flow during Batch Releases	GPM	19417.92	NA
 <u>ABNORMAL RELEASES</u>			
Number of Abnormal Releases		0	10
Total Activity Released	Ci	0	12.43

PORTLAND GENERAL ELECTRIC COMPANY
 TROJAN NUCLEAR PLANT
 LICENSE NO. NPF-1
EFFLUENT AND WASTE DISPOSAL REPORT

PART B-1
 GASEOUS EFFLUENTS
SUMMATION OF ALL RELEASES
 TABLE VI

January 1, 1980 through June 30, 1980

<u>FISSION AND ACTIVATION GASES</u>	Unit	1st Quarter	2nd Quarter	Estimated Error, %
Total Activity Released	Ci	1.61E+2	9.01E+1	± 3.5E+1
Average Release Rate for Quarter	µCi/sec	2.05E+1	1.15E+1	
Percent of Limit - Instantaneous	%	5.15E-2	3.35E-2	
Quarterly Average	%	8.11E-2	1.22E-1	
Twelve Month Average	%	6.62E-1	5.77E-1	
 <u>IODINE 131</u>				
Total Iodine 131 Released	Ci	1.24E-3	9.58E-3	± 3.5E+1
Average Release Rate for Quarter	µCi/sec	1.58E-4	1.22E-3	
Percent of Limit - Quarterly Total	%	6.20E-2	4.79E-1	
Twelve Month Total	%	3.28E-1	4.75E-1	
 <u>PARTICULATES</u>				
Total with Half-Lives > 8 days	Ci	1.41E-3	1.08E-2	±3.5E+1
Average Release Rate for Quarter	µCi/sec	1.79E-4	1.37E-3	
Percent of Limit - Instantaneous	%	9.48E-2	5.74E-1	
Quarterly Average	%	.5.49E-1	4.25E0	
Twelve Month Average	%	2.99E0	4.25E0	
Total Gross Alpha Released	Ci	<6.30E-7	<2.97E-6	
 <u>TRITIUM</u>				
Total Released	Ci	2.17E0	2.85E0	±3.0E+1
Average Release Rate for Quarter	µCi/sec	2.76E-1	3.62E-1	
No Technical Specification Limits	A-7			

PORTLAND GENERAL ELECTRIC COMPANY
 TROJAN NUCLEAR PLANT
 LICENSE NO. NPF-1
EFFLUENT AND WASTE DISPOSAL REPORT

PART B-2
 GASEOUS EFFLUENTS
 GROUND LEVEL RELEASES

TABLE VII
 January 1, 1980 through June 30, 1980

<u>Nuclides Released</u>	<u>Unit</u>	Continuous Mode		Batch Mode	
		<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>
<u>FISSION GASES</u>					
Krypton 89	Ci		1.97E-2		
Argon 41	Ci	3.26E-2	2.56E-2	6.38E-2	6.37E-3
Krypton 85	Ci			5.16E-1	9.84E-1
Krypton 85m	Ci	2.59E-1	7.31E-2	3.43E-2	3.45E-2
Krypton 87	Ci	5.28E-1	1.69E-1	8.70E-3	6.96E-3
Krypton 88	Ci	6.46E-1	2.17E-1	3.25E-2	6.27E-3
Xenon 131m	Ci	8.28E-1	2.82E-1	4.46E-2	9.06E-1
Xenon 133	Ci	1.33E+2	1.88E+1	1.58E+1	5.61E+1
Xenon 135	Ci	4.64E0	4.21E0	5.59E-1	1.80E0
Xenon 135m	Ci	3.36E0	1.07E0		2.27E-1
Xenon 138	Ci	8.55E-1	3.18E-1	1.12E-2	
Xenon 133m	Ci	7.24E-2	3.67E-2	2.87E-1	3.57E-1
Xenon 137	Ci	5.14E-1	2.14E-1		
Unidentified	Ci				4.21E0
TOTAL FOR QUARTER	Ci	1.45E+2	2.54E+1	1.74E+1	6.46E+1
<u>IODINES</u>					
Iodine 131	Ci	1.24E-3	1.51E-3	2.70E-7	8.08E-3
Iodine 133	Ci	5.11E-4	2.53E-4	<1.34E-7	<1.50E-4
Iodine 135	Ci	<1.80E-3	<6.10E-4	<8.15E-7	<5.50E-4
Iodine 132	Ci	3.75E-7			
Iodine 134	Ci	7.18E-9			
TOTAL FOR QUARTER	Ci	3.55E-3	2.37E-3	1.22E-6	8.78E-3
<u>PARTICULATES</u>					
Strontium 89	Ci	<5.06E-6	<2.75E-6	<6.34E-9	<5.12E-5
Strontium 90	Ci	<5.06E-6	<2.75E-6	<6.34E-9	<5.12E-5
Cesium 134	Ci				2.32E-5
Cesium 137	Ci	1.87E-6		5.25E-8	1.55E-4
Barium 140	Ci	<1.50E-4	<1.88E-4	<3.37E-7	<4.89E-4
Lanthanum 140	Ci	<6.10E-5	<3.70E-5	<8.23E-8	<1.37E-4
Niobium 95	Ci	3.69E-6	2.16E-9		1.17E-6
Cobalt 60	Ci	9.43E-8	1.17E-7	1.02E-8	1.32E-4
Silver 110M	Ci	1.63E-7			
Cobalt 58	Ci			2.76E-8	2.02E-5
Manganese 54	Ci			7.81E-9	7.85E-6
Unidentified	Ci	<5.06E-6	<2.75E-6	<6.34E-9	<5.12E-5
TOTAL FOR QUARTER	Ci	2.32E-4	2.33E-4	5.36E-7	1.12E-3

PORTLAND GENERAL ELECTRIC COMPANY
TROJAN NUCLEAR PLANT
LICENSE NO. NPF-1
EFFLUENT AND WASTE DISPOSAL REPORT

PART B-3
GASEOUS EFFLUENTS
ELEVATED RELEASES
TABLE VIII

January 1, 1980 through June 30, 1980

No elevated release points.

PORTLAND GENERAL ELECTRIC COMPANY
 TROJAN NUCLEAR PLANT
 LICENSE NO. NPF-1
EFFLUENT AND WASTE DISPOSAL REPORT

PART C-1
 LIQUID EFFLUENTS
SUMMATION OF ALL RELEASES
 TABLE IX

January 1, 1980 through June 30, 1980

<u>FISSION AND ACTIVATION PRODUCTS</u>	<u>Unit</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>Estimated Error %</u>
Total Activity Released (excluding gases, tritium, and alpha)	Ci	1.27E-1	3.81E-1	± 3.5E+1
Average Diluted Concentration	µCi/ml	1.40E-8	3.96E-8	
Percent of Limit - Quarterly Total	%	1.28E0	3.81E0	
Twelve Month Total	%	3.53E0	5.20E0	
Fraction of MPC	%	3.16E-1	6.85E-1	
<u>TRITIUM</u>				
Total Released	Ci	2.53E+1	4.77E+1	±3.0E+1
Average Diluted Concentration	µCi/ml	2.80E-6	4.96E-6	
Fraction of MPC	%	NA	NA	
<u>DISSOLVED AND ENTRAINED GASES</u>				
Total Activity Released	Ci	1.14E-1	5.85E-2	±3.5E+1
Average Diluted Concentration	µCi/ml	1.26E-8	6.08E-9	
Fraction of MPC	%	NA	NA	
<u>GROSS ALPHA RADIOACTIVITY</u>				
Total Release	Ci	< 4.39E-5	< 6.19E-5	±3.0E+1
<u>UNDILUTED VOLUME OF WASTE RELEASED</u>				
	Liters	1.86E6	3.02E6	±5.0E0
<u>VOLUME OF DILUTION WATER</u>				
	Liters	9.04E9	9.62E9	±1.5E+1

PORTLAND GENERAL ELECTRIC COMPANY
TROJAN NUCLEAR PLANT
LICENSE NO. NPF-1
EFFLUENT AND WASTE DISPOSAL REPORT

PART C-2
LIQUID EFFLUENTS
TABLE X

January 1, 1980 through June 30, 1980

<u>NUCLIDES RELEASED</u>	<u>Unit</u>	<u>Continuous Mode</u>		<u>Batch Mode</u>	
		<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>
Strontium - 89	Ci		2.38E-4	6.63E-4	1.99E-3
Strontium - 90	Ci		3.49E-5	9.83E-5	5.09E-4
Cesium - 134	Ci		2.08E-3	8.72E-4	7.76E-3
Cesium - 137	Ci		3.38E-3	1.67E-3	1.22E-2
Iodine - 131	Ci		5.29E-3	2.88E-3	2.09E-3
Cobalt - 58	Ci		3.33E-5	3.26E-2	1.29E-1
Cobalt - 60	Ci		7.77E-5	3.84E-2	6.60E-2
Iron - 59	Ci			1.52E-4	2.59E-3
Zinc - 65	Ci				
Manganese - 54	Ci		1.03E-4	5.48E-3	1.16E-1
Chromium - 51	Ci			1.27E-2	3.68E-2
Niobium - 95	Ci			6.92E-3	1.96E-2
Zirconium - 95	Ci			4.08E-3	1.01E-2
Molybdenum - 99	Ci			5.24E-5	4.84E-4
Technetium - 99m	Ci			5.56E-5	5.03E-4
Barium - 140	Ci		1.35E-3	<3.49E-3	5.50E-3
Lanthanum - 140	Ci		1.27E-4	<8.20E-4	1.73E-3
Cerium - 141	Ci			4.90E-4	1.88E-3
<u>Sodium - 24</u>	Ci		1.19E-5	1.82E-5	
<u>Iodine - 132</u>	Ci			2.74E-5	
<u>Iodine - 133</u>	Ci		2.85E-3	2.85E-3	5.82E-4
<u>Iodine - 135</u>	Ci		1.68E-4	6.66E-4	
<u>Ruthenium - 103</u>	Ci			1.40E-3	3.05E-3
<u>Cerium - 144</u>	Ci			1.28E-3	1.04E-2
<u>Silver - 110M</u>	Ci		1.78E-4	6.16E-3	1.05E-2
<u>Antimony - 124</u>	Ci		1.91E-3	9.51E-4	8.12E-3
<u>Cobalt - 57</u>	Ci			4.86E-6	3.75E-4
<u>Iodine - 134</u>	Ci			1.75E-5	
<u>Antimony - 125</u>	Ci			3.36E-3	1.85E-2
<u>Cesium - 136</u>	Ci		1.15E-4		
<u>Tin - 113</u>	Ci				4.07E-4
<u>Tellurium - 132</u>	Ci				1.67E-4
<u>Neptunium - 239</u>	Ci				6.15E-4
<u>Rubidium - 88</u>	Ci				7.15E-5
Unidentified	Ci		1.38E-4	1.47E-6	7.72E-5
TOTAL FOR QUARTER	Ci	0	1.80E-2	1.27E-1	3.63E-1
Xenon - 133	Ci		2.17E-3	1.11E-1	3.00E-2
Xenon - 135	Ci		2.05E-4	2.38E-3	2.54E-2
Xenon - 133M	Ci			8.90E-4	6.39E-4
<u>Krypton - 85M</u>	Ci	A-11			7.72E-5

PORTLAND GENERAL ELECTRIC COMPANY
 TROJAN NUCLEAR PLANT
 LICENSE NO. NPF-1
EFFLUENT AND WASTE DISPOSAL REPORT

PART D
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS
 TABLE XI

January 1, 1980 through June 30, 1980

<u>SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL</u> <u>(Not Irradiated Fuel) - Type of Waste</u>	<u>Activity</u> <u>During</u> <u>6 Months</u>	<u>Volume</u> <u>During</u> <u>6 Months</u>	<u>Estimated</u> <u>Total</u> <u>Error %</u>
1. Spent Resin, Filter Sludges, Evaporator Bottoms, etc.	9.852CI	62.086M ³	25%
2. Dry Compressible Waste, Contaminated Equipment, etc.	20.957CI	253.89M ³	25%
3. Irradiated components, Control Rods, etc.	0	0	
4. Other	0	0	

ESTIMATE OF MAJOR NUCLIDE DISTRIBUTION BY TYPE OF WASTE

Nuclide

1. See Attached Sheets.
2. See Attached Sheets.
- 3.
- 4.

SOLID WASTE DISPOSITION

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
16	Exclusive Truck	Nuclear Engineering Co. P.O. Box 638 Richland, Wa. 99352

IRRADIATED FUEL SHIPMENTS DISPOSITION

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
0	NA	NA

ESTIMATE OF MAJOR NUCLIDE DISTRIBUTION BY TYPE OF WASTE

1.	<u>Nuclide</u>	<u>CI</u>		
	Mn-54	5.531E-1		
	Co-58	1.926E0		
	Co-60	4.154E0		
	Cs-134	4.933E-1		
	Cs-137	1.025E0		
	Sb-124	4.095E-1		
	Ba-140	1.362E-4		
	I-131	2.143E-2		
	Cs-136	5.373E-5		
	Zr-95	1.459E-1		
	Co-57	1.550E-2		
	Nb-95	3.404E-1		
	Ce-144	1.924E-1		
	Ag-110m	1.115E-1		
	Cr-51	3.836E-2		
	Fe-59	1.248E-2		
	Cs-113	3.287E-3		
	Co-57	1.824E-2		
	Co-122	7.535E-3		
	Ce-141	2.058E-2		
	Ia-140	3.015E-6		
	I-133	4.000E-9		
	Mo-99	1.880E-7		
2.	<u>Nuclides</u>	<u>CI</u>	<u>Nuclides</u>	<u>CI</u>
	Zr-95	3.706E-1	I-132	1.000E-3
	Mn-54	2.219E-1	Mo-99	2.000E-3
	Co-58	1.248E+1	Tc-99m	2.000E-3
	Mo-99	2.298E-2	Ru-103	8.821E-2
	Co-60	2.331E0	Te-132	1.000E-3
	I-131	5.573E-2	Ce-141	8.304E-2
	Cs-134	2.761E-2	Ce-144	2.440E-1
	Nb-95	5.625E-1	Fe-59	5.955E-2
	Cr-51	4.281E0	Co-57	3.514E-2
	Cs-137	5.806E-2	Sb-124	2.990E-4
	Sn-113	5.208E-2		

B. OFFSITE RADIATION DOSES

Offsite radiation doses from gaseous and liquid effluents for the first and second quarters of 1980 are presented in this section. Included are quarterly doses to individuals at locations of maximum actual exposure and quarterly doses to the 50-mile population. Doses are presented separately for batch and continuous releases and for noble gas, gaseous iodine and particulate, and liquid effluents.

Exposure locations are based on the land-use survey presented in the FSAR, effective through Amendment 33, and the annual survey of agriculture production, effective November 15, 1979. Meteorological data used in the analyses are presented in Section C of this report.

Models and assumptions used in performing the dose analyses for the first half of 1980 are presented in Sections 11.2 and 11.3 of the Trojan FSAR. Additional assumptions are given in this section.

TABLE B-1

Sheet 1 of 2

PARAMETERS USED IN CALCULATING DOSES FROM GASEOUS EFFLUENTS
(First Half 1980)

Parameter	Value
Accumulation and Decay Times (day)	
Meat animal time in pasture until butchering	730.0
Leafy vegetable harvest to consumption by man	1.0
Root vegetable harvest to consumption by man	60.0
Forage harvest to consumption by animals	0.0
Animal butchering to consumption	20.0
Food and water ingestion by cow/goat to milking	2.0
Deposition onto soil	7,300.0
Human Consumption Rates (g/day)	
Leafy vegetables by adult	175.0
Root vegetables by adult	1,224.0
Meat by adult	300.0
Milk by adult	1,100.0
Milk by infant	900.0
Breathing Rates (l/day)	
Adult	3,840.0
Infant	21,900.0
Annual Exposure Times (hr/yr)	
Air inhalation	8,760.0
Ground contamination	6,132.0
Consumption Periods (month/yr)	
Leafy vegetables by adult	6.0
Root vegetables by adult	6.0
Meat by adult	12.0
Milk by adult and infant	12.0
Pasture vegetation by animals	6.0
Field (Weathering) Decay Constant (day ⁻¹)	0.0495
Growing Period of Vegetables (month/yr)	2.0
Concentration of Water in Soil (g/g)	0.2
Concentration of Water in Air (g/cc)	8.0 x 10 ⁻⁶
Fractional Concentration of Water in Biota (g/g)	0.75
Fraction of Water Intake from Forage for Beef and Milk Animals	0.4
Fraction of Water in Vegetation from Air	0.5
Soil Exposure Geometry Factor	2.5

TABLE B-1

Sheet 2 of 2

Parameter	Value
Fraction of Particulates Initially Deposited on Leafy Vegetables	0.2
Fraction of Particulates Initially Deposited on Root Vegetables	0.02
Fraction of Iodines Initially Deposited on Leafy Vegetables	1.0
Fraction of Iodines Initially Deposited on Root Vegetables	0.1
Pasture Vegetation Surface Density (g/cm^2)	0.070
Surface Density of Soil Plow Layer (g/cm^2)	24.0
Vegetable Surface Density (g/cm^2)	0.2
Animal Consumption Rates (g/day)	
Pasture vegetation by meat animal	50,000.0
Pasture vegetation by milk cow	50,000.0
Pasture vegetation by milk goat	6,000.0
Mass of Standard Man (g)	70,000.0

TABLE B-2

Sheet 1 of 2

PARAMETERS USED IN CALCULATING DOSES FROM LIQUID EFFLUENTS

Parameter	Value	
	1st Qtr. 1980	2nd Qtr. 1980
Plant Dilution Flow Rate (gpm)	18,400.0	19,600.0
Columbia River Flow Rate (cfs)	240,047.0	274,567.0
Dilution Factors		
Drinking water	5,855.0	6,287.0
Swimming water	1,288.0	1,383.0
Aquatic biota	1,288.0	1,383.0
Shoreline sediment	1,288.0	1,383.0
Irrigation water	5,855.0	6,287.0
Milk and meat animal water	5,855.0	6,287.0
Decay Times (day)		
Discharge to drinking water	0.64	0.63
Discharge to swimming water	0.0	0.0
Discharge to aquatic biota consumption	1.0	1.0
Discharge to deposition on shoreline sediment	0.0	0.0
Discharge to irrigation water withdrawal	0.64	0.63
Discharge to milk and meat animal water withdrawal	0.64	0.63
Leafy vegetable harvest to consumption by man		1.0
Root vegetable harvest to consumption by man		60.0
Stored feed harvest to consumption by animals		0.0
Animal butchering to consumption		20.0
Food and water ingestion by cow/goat to milking		2.0
Accumulation Times (day)		
Shoreline sediment		7,300.0
Irrigated soil		7,300.0
Irrigated vegetables and pasture grass		60.0
Meat animals		730.0
Adult Consumption Rates (g/day)		
Drinking water		2,000.0
Fish		57.5
Invertebrates (crayfish)		2.0
Irrigated leafy vegetables		175.0
Irrigated root vegetables		1,224.0
Milk from irrigated pastureland		1,100.0
Meat from irrigated pastureland		300.0
Total dietary intake by standard man		1,920.0
Annual Exposure Times (hr/yr)		
Swimming and boating		67.0
Shoreline activities		67.0
Irrigated pasture		6,132.0
Infant Consumption Rates (g/day)		
Drinking water		600.0
Milk from irrigated pastureland		900.0

TABLE B-2

Sheet 2 of 2

PARAMETERS USED IN CALCULATING DOSES FROM LIQUID EFFLUENTS

Parameter	Value	
	1st Qtr. 1980	2nd Qtr. 1980
Consumption Rate (month/yr)		
Vegetables by adult	6.0	
Meat by adult	12.0	
Milk by adult and infant	12.0	
Irrigated pasture grass and Columbia River water by meat animals	6.0	
Irrigated pasture grass and Columbia River water by milk animals	6.0	
Field (weathering) Decay Constant (day^{-1})	0.0495	
Irrigation Rate (ft/yr)	3.0	
Fractional Concentration of Water in Soil (g/g)	0.2	
Fractional Concentration of Water in Biota (g/g)	0.75	
Fraction of Water Intake from Forage for Beef and Milk Animals	0.4	
Fraction of Water in Vegetation from Irrigation (g/g)	0.5	
Fraction of Water in Vegetation from Air (g/g)	0.5	
Shoreline Sediment Exposure Geometry Factor	5.0	
Irrigated Soil Exposure Geometry Factor	2.5	
Fraction of Isotope in Irrigation Water That is Initially Retained by Leafy Vegetables	0.25	
Fraction of Isotope in Irrigation Water That is Initially Retained by Root Vegetables	0.025	
Pasture Vegetation Surface Density (g/cm^2)	0.070	
Vegetable Surface Density (g/cm^2)	0.20	
Surface Density of Soil Plow Layer (g/cm^2)	24.0	
Animal Consumption Rates (g/day)		
Water by milk cow	60,000.0	
Water by milk goat	8,000.0	
Water by beef	50,000.0	
Pasture vegetation by milk cow	50,000.0	
Pasture vegetation by milk goat	6,000.0	
Pasture vegetation by beef	50,000.0	
Total dietary intake by beef or milk cow	70,000.0	
Mass of Standard Man (g)	70,000.0	

TABLE B-3

1 QUARTER 1988

DOSES FROM LIQUID EFFLUENTS
(MREM)

EXPOSURE PATHWAY	TOTAL BODY	SKIN	LUNG	BONE	ADULT THYROID	INFANT THYROID	OTHER INTERNAL ORGANS
AQUATIC AT MAXIMUM LOCATION							
DRINKING WATER	1.3E-05	1.3E-05	1.9E-05	1.6E-05	3.9E-06	1.2E-04	3.5E-05
FISH CONSUMPTION	1.1E-04	1.1E-04	4.0E-05	1.7E-04	1.6E-04	0.	2.1E-03
INVERTEBRATE CONSUMPTION	7.8E-06	7.8E-06	7.3E-06	9.2E-06	7.9E-06	0.	1.6E-04
EXPOSURE TO SHORELINE SEDIMENT	8.2E-05	8.2E-05	8.2E-05	8.2E-05	8.2E-05	0.	9.2E-05
SWIMMING AND BOATING	5.1E-07	7.5E-07	5.1E-07	5.1E-07	5.1E-07	0.	5.1E-07
AQUATIC TOTAL	2.1E-04	2.1E-04	1.5E-04	2.8E-04	2.9E-04	1.2E-04	2.4E-03
AQUATIC AT AGRICULTURAL LOCATION							
DRINKING WATER	1.3E-05	1.3E-05	1.9E-05	1.6E-05	3.9E-05	1.2E-04	3.5E-05
FISH CONSUMPTION	2.5E-05	2.5E-05	8.9E-06	3.8E-05	3.5E-05	0.	4.5E-04
INVERTEBRATE CONSUMPTION	1.7E-06	1.7E-06	1.6E-06	2.0E-06	1.7E-06	0.	3.6E-05
EXPOSURE TO SHORELINE SEDIMENT	1.8E-05	1.8E-05	1.8E-05	1.8E-05	1.8E-05	0.	1.8E-05
SWIMMING AND BOATING	1.1E-07	1.6E-07	1.1E-07	1.1E-07	1.1E-07	0.	1.1E-07
IRRIGATION AND LIVESTOCK WATERING							
EXPOSURE TO AGRICULTURAL SOIL	1.2E-04	1.2E-04	1.2E-04	1.2E-04	1.2E-04	1.2E-04	1.2E-04
LEAFY VEGETABLE CONSUMPTION	9.1E-07	9.1E-07	7.8E-07	1.7E-06	2.4E-06	0.	4.5E-06
ROOT VEGETABLE CONSUMPTION	2.0E-06	2.0E-06	2.6E-06	2.9E-06	2.7E-06	0.	5.4E-06
MEAT CONSUMPTION	6.4E-06	6.4E-06	4.4E-06	1.6E-05	5.5E-06	0.	4.9E-06
MILK CONSUMPTION(COW)*	4.2E-06	4.2E-06	4.8E-06	5.3E-06	1.5E-05	9.0E-05	2.7E-05
MILK CONSUMPTION(GOAT)	6.6E-06	6.6E-06	5.4E-06	9.4E-06	1.9E-05	1.3E-04	1.7E-05
AGRICULTURAL TOTAL							
EXCLUDING COW MILK CONSUMPTION	1.9E-04	1.9E-04	1.8E-04	2.2E-04	2.4E-04	3.7E-04	6.9E-04
EXCLUDING GOAT MILK CONSUMPTION	1.9E-04	1.9E-04	1.8E-04	2.2E-04	2.4E-04	3.3E-04	7.0E-04

TABLE B-4

FIRST QUARTER 1980

POPULATION DOSE (50-MILE) FROM
LIQUID EFFLUENTS
(MAN-REM)

EXPOSURE PATHWAY	TOTAL BODY	THYROID
AQUATIC		
DRINKING WATER	5.2E-05	1.6E-04
FISH CONSUMPTION	1.1E-02	1.5E-02
INVERTEBRATE CONSUMPTION	2.3E-05	2.3E-05
EXPOSURE TO CONTAMINATED SEDIMENT	7.3E-05	7.3E-05
SWIMMING AND BOATING	2.3E-07	2.3E-07
IRRIGATION AND LIVESTOCK WATERING		
LEAFY VEGETABLE CONSUMPTION	7.1E-08	1.9E-07
ROOT VEGETABLE CONSUMPTION	1.6E-07	2.1E-07
MEAT CONSUMPTION	8.8E-06	7.6E-06
MILK CONSUMPTION	1.7E-05	6.5E-05
EXPOSURE TO CONTAMINATED SOIL	1.7E-05	1.7E-05
TOTAL	1.1E-02	1.6E-02
AVERAGE DOSE (MREM/PERSON)	5.4E-06	7.5E-06

TABLE B-5

FIRST QUARTER 1980
BATCH RELEASES

DOSES FROM NOBLE GASES AT
SITE BOUNDARY AND RESIDENCE OF
HIGHEST CONCENTRATION

	<u>Site Boundary</u> [a]	<u>Residence</u> [b]
Beta Air Dose (mrad)	9.5E-3	7.7E-3
Gamma Air Dose (mrad)	3.9E-3	2.2E-3
Beta Skin Dose (mrem)	-	3.0E-3
Beta + Gamma Skin Dose (mrem)	-	5.5E-3
Beta Total Body Dose (mrem)	-	1.5E-4
Gamma Total Body Dose (mrem)	-	1.7E-3
Beta + Gamma Total Body Dose (mrem)	-	1.8E-3

[a] NNW sector at 674 meters.

[b] NNW sector at 768 meters.

TABLE B-6

FIRST QUARTER 1980
CONTINUOUS RELEASES

DOSES FROM NOBLE GASES AT
SITE BOUNDARY AND RESIDENCE OF
HIGHEST CONCENTRATION

	<u>Site</u> <u>Boundary</u> [a]	<u>Residence</u> [b]
Beta Air Dose (mrad)	6.0E-2	5.5E-2
Gamma Air Dose (mrad)	3.1E-2	2.0E-2
Beta Skin Dose (mrem)	-	2.3E-2
Beta + Gamma Skin Dose (mrem)	-	4.6E-2
Beta Total Body Dose (mrem)	-	3.7E-3
Gamma Total Body Dose (mrem)	-	1.6E-2
Beta + Gamma Total Body Dose (mrem)	-	2.0E-2

[a] NNW sector at 674 meters.

[b] North sector at 692 meters.

TABLE B-7

FIRST QUARTER 1980
BATCH + CONTINUOUS RELEASES

DOSES FROM NOBLE GASES AT
SITE BOUNDARY AND RESIDENCE OF
HIGHEST CONCENTRATION

	<u>Site</u> <u>Boundary</u> [a]	<u>Residence</u> [b]
Beta Air Dose (mrad)	7.0E-2	6.3E-2
Gamma Air Dose (mrad)	3.5E-2	2.2E-2
Beta Skin Dose (mrem)	-	2.6E-2
Beta + Gamma Skin Dose (mrem)	-	5.2E-2
Beta Total Body Dose (mrem)	-	3.9E-3
Gamma Total Body Dose (mrem)	-	1.8E-2
Beta + Gamma Total Body Dose (mrem)	-	2.2E-2

[a] Maximum site boundary location.

[b] Maximum residence location.

TABLE B-8

1 QUARTER 1980 BATCH RELEASES

DOSES FROM CASEOUS EFFLUENTS (EXCLUDING
MOBILE GASES) AT MAXIMUM OFFSITE EXPOSURE LOCATIONS
(MREM)

EXPOSURE LOCATION AND PATHWAY	TOTAL BODY	SKIN	LUNG	BONE	ADULT THYROID	INFANT THYROID	OTHER INTERNAL ORGANS
GARDEN (NNW SECTOR AT 966. METERS)							
AIR INHALATION	1.70E-06	1.70E-06	2.74E-06	2.27E-06	3.64E-06	4.50E-06	2.60E-06
EXPOSURE TO SOIL	1.42E-06	1.42E-06	1.42E-06	1.42E-06	1.42E-06	1.42E-06	1.42E-06
LEAFY VEGETABLE CONSUMPTION	3.40E-07	3.40E-07	3.89E-07	6.70E-07	3.64E-06	0.	5.24E-07
ROOT VEGETABLE CONSUMPTION	1.44E-06	1.44E-06	2.13E-06	1.96E-06	2.16E-06	0.	2.03E-06
TOTAL	4.91E-06	4.91E-06	6.68E-06	6.32E-06	1.09E-05	5.93E-06	6.58E-06
MEAT ANIMAL (NNW SECTOR AT 2414. METERS)							
AIR INHALATION	4.24E-07	4.24E-07	6.82E-07	5.64E-07	9.15E-07	1.14E-06	6.40E-07
EXPOSURE TO SOIL	3.03E-07	3.03E-07	3.03E-07	3.03E-07	3.03E-07	3.03E-07	3.03E-07
LEAFY VEGETABLE CONSUMPTION	7.86E-08	7.86E-08	9.31E-08	1.49E-07	7.86E-07	0.	1.22E-07
ROOT VEGETABLE CONSUMPTION	3.49E-07	3.49E-07	5.24E-07	4.60E-07	5.30E-07	0.	5.03E-07
MEAT CONSUMPTION	5.87E-07	5.87E-07	4.17E-07	1.66E-06	5.76E-07	0.	1.45E-07
TOTAL	1.74E-06	1.74E-06	2.02E-06	3.13E-06	3.11E-06	1.44E-06	1.72E-06
MILK COW (NNW SECTOR AT 8045. METERS)							
AIR INHALATION	6.24E-08	6.24E-08	1.00E-07	8.30E-08	1.30E-07	1.73E-07	9.54E-08
EXPOSURE TO SOIL	3.40E-08	3.40E-08	3.40E-08	3.40E-08	3.40E-08	3.40E-08	3.40E-08
LEAFY VEGETABLE CONSUMPTION	1.03E-08	1.03E-08	1.29E-08	1.82E-08	9.06E-08	0.	1.61E-08
ROOT VEGETABLE CONSUMPTION	4.94E-08	4.94E-08	7.58E-08	6.19E-08	7.65E-08	0.	7.34E-08
MEAT CONSUMPTION	6.69E-08	6.69E-08	4.85E-08	1.87E-07	6.63E-08	0.	1.79E-08
COW MILK CONSUMPTION	2.72E-08	2.72E-08	3.79E-08	3.63E-08	4.20E-07	3.18E-06	5.32E-08
TOTAL	2.50E-07	2.50E-07	3.10E-07	4.20E-07	8.25E-07	3.39E-06	2.90E-07
MILK GOAT (NNW SECTOR AT 3218. METERS)							
AIR INHALATION	2.76E-07	2.76E-07	4.44E-07	3.67E-07	5.90E-07	7.44E-07	4.22E-07
EXPOSURE TO SOIL	1.83E-07	1.83E-07	1.83E-07	1.83E-07	1.83E-07	1.83E-07	1.83E-07
LEAFY VEGETABLE CONSUMPTION	4.94E-08	4.94E-08	5.95E-08	9.17E-08	4.76E-07	0.	7.68E-08
ROOT VEGETABLE CONSUMPTION	2.25E-07	2.25E-07	3.39E-07	2.91E-07	3.43E-07	0.	3.27E-07
MEAT CONSUMPTION	3.55E-07	3.55E-07	2.54E-07	9.98E-07	3.49E-07	0.	8.96E-08
GOAT MILK CONSUMPTION	1.77E-07	1.77E-07	1.91E-07	3.00E-07	2.68E-06	2.08E-05	3.65E-07
TOTAL	1.26E-06	1.26E-06	1.47E-06	2.23E-06	4.63E-06	2.17E-05	1.46E-06

TABLE B-9

1 QUARTER 1980 CONTINUOUS RELEASES

DOSES FROM CASEDJS EFFLUENTS (EXCLUDING
MOBILE GASES) AT MAXIMUM OFFSITE EXPOSURE LOCATIONS
(MREM)

EXPOSURE LOCATION AND PATHWAY	TOTAL BODY	SKIN	LUNG	BONE	ADULT THYROID	INFANT THYROID	OTHER INTERNAL ORGANS
GARDEN (NNW SECTOR AT 966. METERS)							
AIR INHALATION	8.42E-04	8.42E-04	1.34E-03	1.18E-03	4.72E-03	7.36E-03	1.37E-03
EXPOSURE TO SOIL	7.80E-05	7.80E-05	7.80E-05	7.80E-05	7.80E-05	7.80E-05	7.80E-05
LEAFY VEGETABLE CONSUMPTION	1.92E-04	1.92E-04	2.15E-04	3.72E-04	1.08E-02	0.	3.83E-04
ROOT VEGETABLE CONSUMPTION	7.25E-04	7.25E-04	1.06E-03	1.02E-03	1.11E-03	0.	9.65E-04
TOTAL	1.84E-03	1.84E-03	2.69E-03	2.65E-03	1.67E-02	7.44E-03	2.79E-03
MEAT ANIMAL (NNW SECTOR AT 2414. METERS)							
AIR INHALATION	2.13E-04	2.13E-04	3.38E-04	2.97E-04	1.22E-03	1.91E-03	3.47E-04
EXPOSURE TO SOIL	1.65E-05	1.65E-05	1.65E-05	1.65E-05	1.65E-05	1.65E-05	1.65E-05
LEAFY VEGETABLE CONSUMPTION	4.40E-05	4.40E-05	5.12E-05	8.23E-05	2.30E-03	0.	8.67E-05
ROOT VEGETABLE CONSUMPTION	1.77E-04	1.77E-04	2.64E-04	2.39E-04	2.74E-04	0.	2.44E-04
MEAT CONSUMPTION	3.31E-04	3.31E-04	2.40E-04	9.47E-04	6.96E-04	0.	4.13E-05
TOTAL	7.82E-04	7.82E-04	9.09E-04	1.58E-03	4.51E-03	1.93E-03	7.35E-04
MILK COW (NNW SECTOR AT 8045. METERS)							
AIR INHALATION	3.16E-05	3.16E-05	5.04E-05	4.42E-05	1.91E-04	3.01E-04	5.19E-05
EXPOSURE TO SOIL	1.79E-06	1.79E-06	1.79E-06	1.79E-06	1.79E-06	1.79E-06	1.79E-06
LEAFY VEGETABLE CONSUMPTION	5.61E-06	5.61E-06	6.96E-06	9.76E-06	2.51E-04	0.	1.08E-05
ROOT VEGETABLE CONSUMPTION	2.50E-05	2.50E-05	3.83E-05	3.18E-05	3.94E-05	0.	3.61E-05
MEAT CONSUMPTION	3.65E-05	3.65E-05	2.69E-05	1.03E-04	7.64E-05	0.	5.44E-06
COW MILK CONSUMPTION	1.40E-05	1.40E-05	2.05E-05	1.67E-05	1.22E-03	9.83E-03	4.00E-05
TOTAL	1.15E-04	1.15E-04	1.45E-04	2.07E-04	1.78E-03	1.01E-02	1.46E-04
MILK GOAT (NNW SECTOR AT 3218. METERS)							
AIR INHALATION	1.42E-04	1.42E-04	2.26E-04	1.99E-04	8.24E-04	1.29E-03	2.32E-04
EXPOSURE TO SOIL	1.01E-05	1.01E-05	1.01E-05	1.01E-05	1.01E-05	1.01E-05	1.01E-05
LEAFY VEGETABLE CONSUMPTION	2.81E-05	2.81E-05	3.33E-05	5.15E-05	1.41E-03	0.	5.50E-05
ROOT VEGETABLE CONSUMPTION	1.16E-04	1.16E-04	1.75E-04	1.55E-04	1.81E-04	0.	1.63E-04
MEAT CONSUMPTION	2.03E-04	2.03E-04	1.48E-04	5.79E-04	4.27E-04	0.	2.66E-05
GOAT MILK CONSUMPTION	7.84E-05	7.84E-05	1.03E-04	1.11E-04	8.21E-03	6.66E-02	2.31E-04
TOTAL	5.79E-04	5.79E-04	6.96E-04	1.10E-03	1.11E-02	6.79E-02	7.18E-04

TABLE B-10

1 QUARTER 1980 BATCH + CONTINUOUS RELEASES

DOSES FROM GASEOUS EFFLUENTS (EXCLUDING
MOBILE GASES) AT MAXIMUM OFFSITE EXPOSURE LOCATIONS
(MREM)

EXPOSURE LOCATION AND PATHWAY	TOTAL BODY	SKIN	LUNG	BONE	ADULT THYROID	INFANT THYROID	OTHER INTERNAL ORGANS
GARDEN MAXIMUM LOCATION							
AIR INHALATION	8.44E-04	8.44E-04	1.34E-03	1.18E-03	4.72E-03	7.36E-03	1.37E-03
EXPOSURE TO SOIL	7.94E-05	7.94E-05	7.94E-05	7.94E-05	7.94E-05	7.94E-05	7.94E-05
LEAFY VEGETABLE CONSUMPTION	1.92E-04	1.92E-04	2.15E-04	3.73E-04	1.09E-02	0.	3.84E-04
ROOT VEGETABLE CONSUMPTION	7.26E-04	7.26E-04	1.06E-03	1.02E-03	1.11E-03	0.	9.67E-04
TOTAL	1.84E-03	1.84E-03	2.70E-03	2.66E-03	1.67E-02	7.45E-03	2.80E-03
MEAT ANIMAL MAXIMUM LOCATION							
AIR INHALATION	2.13E-04	2.13E-04	3.39E-04	2.98E-04	1.22E-03	1.91E-03	3.48E-04
EXPOSURE TO SOIL	1.68E-05	1.68E-05	1.68E-05	1.68E-05	1.68E-05	1.68E-05	1.68E-05
LEAFY VEGETABLE CONSUMPTION	4.41E-05	4.41E-05	5.13E-05	8.24E-05	2.30E-03	0.	8.60E-05
ROOT VEGETABLE CONSUMPTION	1.77E-04	1.77E-04	2.65E-04	2.39E-04	2.75E-04	0.	2.45E-04
MEAT CONSUMPTION	3.32E-04	3.32E-04	2.40E-04	9.49E-04	6.97E-04	0.	4.14E-05
TOTAL	7.84E-04	7.84E-04	9.11E-04	1.58E-03	4.51E-03	1.93E-03	7.37E-04
MILK COW MAXIMUM LOCATION							
AIR INHALATION	3.17E-05	3.17E-05	5.05E-05	4.43E-05	1.91E-04	3.01E-04	5.20E-05
EXPOSURE TO SOIL	1.82E-06	1.82E-06	1.82E-06	1.82E-06	1.82E-06	1.82E-06	1.82E-06
LEAFY VEGETABLE CONSUMPTION	5.62E-06	5.62E-06	6.97E-06	9.78E-06	2.51E-04	0.	1.00E-05
ROOT VEGETABLE CONSUMPTION	2.50E-05	2.50E-05	3.84E-05	3.19E-05	3.95E-05	0.	3.62E-05
MEAT CONSUMPTION	3.66E-05	3.66E-05	2.69E-05	1.03E-04	7.65E-05	0.	5.46E-06
COW MILK CONSUMPTION	1.40E-05	1.40E-05	2.05E-05	1.67E-05	1.22E-03	9.83E-03	4.01E-05
TOTAL	1.15E-04	1.15E-04	1.45E-04	2.07E-04	1.78E-03	1.01E-02	1.46E-04
MILK GOAT MAXIMUM LOCATION							
AIR INHALATION	1.42E-04	1.42E-04	2.26E-04	1.99E-04	8.25E-04	1.29E-03	2.32E-04
EXPOSURE TO SOIL	1.03E-05	1.03E-05	1.03E-05	1.03E-05	1.03E-05	1.03E-05	1.03E-05
LEAFY VEGETABLE CONSUMPTION	2.81E-05	2.81E-05	3.34E-05	5.16E-05	1.41E-03	0.	5.51E-05
ROOT VEGETABLE CONSUMPTION	1.16E-04	1.16E-04	1.75E-04	1.55E-04	1.81E-04	0.	1.63E-04
MEAT CONSUMPTION	2.03E-04	2.03E-04	1.40E-04	5.80E-04	4.27E-04	0.	2.67E-05
GOAT MILK CONSUMPTION	7.86E-05	7.86E-05	1.03E-04	1.11E-04	8.21E-03	6.66E-02	2.31E-04
TOTAL	5.80E-04	5.80E-04	6.97E-04	1.10E-03	1.11E-02	6.79E-02	7.19E-04

TABLE B-11

FIRST QUARTER 1980
BATCH + CONTINUOUS RELEASES

POPULATION DOSE (50-MILE) FROM
GASEOUS EFFLUENTS
(MAN-REM)

EXPOSURE PATHWAY	TOTAL BODY	THYROID
AIR SUBMERSION	5.9E-02	4.8E-02
AIR INHALATION	3.4E-03	2.0E-02
EXPOSURE TO SOIL	1.2E-04	1.2E-04
LEAFY VEGETABLE CONSUMPTION	1.4E-05	5.1E-04
ROOT VEGETABLE CONSUMPTION	6.8E-05	1.1E-04
MEAT CONSUMPTION	6.0E-04	1.3E-03
MILK CONSUMPTION	9.1E-04	7.1E-02
TOTAL	6.4E-02	1.4E-01
AVERAGE DOSE (MREM/PERSON)	3.1E-05	6.9E-05

TABLE B-12

2 QUARTER 1988

DOSES FROM LIQUID EFFLUENTS
(MREM)

EXPOSURE PATHWAY	TOTAL BODY	SKIN	LUNG	BONE	ADULT THYROID	INFANT THYROID	OTHER INTERNAL ORGANS
AQUATIC AT HATINUM LOCATION							
DRINKING WATER	2.9E-05	2.9E-05	3.6E-05	4.1E-05	7.7E-05	2.3E-04	7.9E-05
FISH CONSUMPTION	9.4E-04	9.4E-04	2.8E-04	1.3E-03	1.0E-03	0.	7.1E-03
INVERTEBRATE CONSUMPTION	1.8E-05	1.8E-05	1.6E-05	2.4E-05	1.8E-05	0.	3.6E-04
EXPOSURE TO SHORELINE SEDIMENT	1.5E-04	1.5E-04	1.5E-04	1.5E-04	1.5E-04	0.	1.5E-04
SWIMMING AND BOATING	1.1E-06	1.5E-06	1.1E-06	1.1E-06	1.1E-06	0.	1.1E-06
AQUATIC TOTAL	1.1E-03	1.1E-03	4.8E-04	1.5E-03	1.2E-03	2.3E-04	7.7E-03
AQUATIC AT AGRICULTURAL LOCATION							
DRINKING WATER	2.9E-05	2.9E-05	3.6E-05	4.1E-05	7.7E-05	2.3E-04	7.9E-05
FISH CONSUMPTION	2.1E-04	2.1E-04	6.3E-05	3.0E-04	2.3E-04	0.	1.6E-03
INVERTEBRATE CONSUMPTION	3.9E-06	3.9E-06	3.4E-06	5.3E-06	3.9E-06	0.	7.8E-05
EXPOSURE TO SHORELINE SEDIMENT	3.2E-05	3.2E-05	3.2E-05	3.2E-05	3.2E-05	0.	3.2E-05
SWIMMING AND BOATING	2.4E-07	3.3E-07	2.4E-07	2.4E-07	2.4E-07	0.	2.4E-07
IRRIGATION AND LIVESTOCK WATERING							
EXPOSURE TO AGRICULTURAL SOIL	2.1E-04	2.1E-04	2.1E-04	2.1E-04	2.1E-04	2.1E-04	2.1E-04
LEAFY VEGETABLE CONSUMPTION	3.2E-06	3.2E-06	2.1E-06	6.6E-06	6.2E-06	0.	1.2E-05
ROOT VEGETABLE CONSUMPTION	5.3E-06	5.3E-06	5.4E-06	9.8E-06	6.0E-06	0.	1.2E-05
MEAT CONSUMPTION	3.3E-05	3.3E-05	1.9E-05	8.1E-05	2.6E-05	0.	2.9E-05
MILK CONSUMPTION(COW)	1.6E-05	1.6E-05	1.1E-05	2.2E-05	3.8E-05	2.6E-04	6.9E-05
MILK CONSUMPTION(GOAT)	3.8E-05	3.8E-05	1.7E-05	5.5E-05	6.4E-05	4.7E-04	1.0E-04
AGRICULTURAL TOTAL							
EXCLUDING COW MILK CONSUMPTION	5.6E-04	5.6E-04	3.9E-04	7.4E-04	6.6E-04	9.1E-04	2.2E-03
EXCLUDING GOAT MILK CONSUMPTION	5.4E-04	5.4E-04	3.8E-04	7.1E-04	6.3E-04	7.0E-04	2.1E-03

TABLE B-13

SECOND QUARTER 1988

POPULATION DOSE (50-MILE) FROM
LIQUID EFFLUENTS
(MAN-REM)

EXPOSURE PATHWAY	TOTAL BOD1	THYROID
AQUATIC		
DRINKING WATER	1.2E-04	3.2E-04
FISH CONSUMPTION	9.1E-02	1.0E-01
INVERTEBRATE CONSUMPTION	5.3E-05	5.3E-05
EXPOSURE TO CONTAMINATED SEDIMENT	1.3E-04	1.3E-04
SWIMMING AND BOATING	5.0E-07	5.0E-07
IRRIGATION AND LIVESTOCK WATERING		
LEAFY VEGETABLE CONSUMPTION	2.5E-07	4.9E-07
ROOT VEGETABLE CONSUMPTION	4.2E-07	4.7E-07
MEAT CONSUMPTION	4.6E-05	3.6E-05
MILK CONSUMPTION	6.3E-05	1.7E-04
EXPOSURE TO CONTAMINATED SOIL	3.0E-05	3.0E-05
TOTAL	9.1E-02	1.0E-01
AVERAGE DOSE (MREM/PERSON)	4.4E-05	4.9E-05

TABLE B-14

SECOND QUARTER 1980
BATCH RELEASES

DOSES FROM NOBLE GASES AT
SITE BOUNDARY AND RESIDENCE OF
HIGHEST CONCENTRATION

	<u>Site</u> <u>Boundary</u> [a]	<u>Residence</u> [b]
Beta Air Dose (mrad)	2.2E-2	2.1E-2
Gamma Air Dose (mrad)	7.3E-3	4.9E-3
Beta Skin Dose (mrem)	-	8.8E-3
Beta + Gamma Skin Dose (mrem)	-	1.4E-2
Beta Total Body Dose (mrem)	-	3.3E-4
Gamma Total Body Dose (mrem)	-	3.6E-3
Beta + Gamma Total Body Dose (mrem)	-	4.0E-3

[a] North sector at 663 meters.

[b] North sector at 692 meters.

TABLE B-15

SECOND QUARTER 1980
CONTINUOUS RELEASES

DOSES FROM NOBLE GASES AT
SITE BOUNDARY AND RESIDENCE OF
HIGHEST CONCENTRATION

	<u>Site</u> <u>Boundary</u> [a]	<u>Residence</u> [b]
Beta Air Dose (mrad)	9.6E-3	4.9E-3
Gamma Air Dose (mrad)	6.7E-3	2.4E-3
Beta Skin Dose (mrem)	-	2.8E-3
Beta + Gamma Skin Dose (mrem)	-	5.4E-3
Beta Total Body Dose (mrem)	-	6.2E-4
Gamma Total Body Dose (mrem)	-	2.0E-3
Beta + Gamma Total Body Dose (mrem)	-	2.6E-3

[a] North sector at 663 meters.

[b] NNW sector at 768 meters.

TABLE B-16

SECOND QUARTER 1980
BATCHE + CONTINUOUS RELEASES

DOSES FROM NOBLE GASES AT
SITE BOUNDARY AND RESIDENCE OF
HIGHEST CONCENTRATION

	<u>Site</u> <u>Boundar</u>]	<u>Residence</u> ^[b]
Beta Air Dose (mrad)	3.2E-2		2.6E-2
Gamma Air Dose (mrad)	1.4E-2		7.3E-3
Beta Skin Dose (mrem)	-		1.2E-2
Beta + Gamma Skin Dose (mrem)	-		1.9E-2
Beta Total Body Dose (mrem)	-		9.5E-4
Gamma Total Body Dose (mrem)	-		5.6E-3
Beta + Gamma Total Body Dose (mrem)	-		6.6E-3

[a] Maximum site boundary location.

[b] Maximum residence location.

TABLE B-17

2 QUARTER 1980 BATCH RELEASES

DOSES FROM GASEOUS EFFLUENTS (EXCLUDING
MOBILE GASES) AT MAXIMUM OFFSITE EXPOSURE LOCATIONS
(MREM)

EXPOSURE LOCATION AND PATHWAY	TOTAL BODY	SKIN	LUNG	BONE	ADULT THYROID	INFANT THYROID	OTHER INTERNAL ORGANS
GARDEN (NRW SECTOR AT 966. METERS)							
AIR INHALATION	2.82E-04	2.82E-04	5.89E-04	1.41E-03	7.11E-03	1.23E-02	4.34E-04
EXPOSURE TO SOIL	2.92E-03	2.92E-03	2.92E-03	2.92E-03	2.92E-03	2.92E-03	2.92E-03
LEAFY VEGETABLE CONSUMPTION	5.83E-04	5.83E-04	4.13E-04	1.53E-03	3.80E-02	0.	8.86E-04
ROOT VEGETABLE CONSUMPTION	9.67E-04	9.67E-04	7.81E-04	2.55E-03	9.64E-04	0.	3.62E-04
TOTAL	4.75E-03	4.75E-03	4.70E-03	8.41E-03	4.90E-02	1.52E-02	4.60E-03
MEAT ANIMAL (NRW SECTOR AT 2414. METERS)							
AIR INHALATION	6.71E-05	6.71E-05	1.41E-04	3.35E-04	1.74E-03	3.00E-03	1.04E-04
EXPOSURE TO SOIL	6.16E-04	6.16E-04	6.16E-04	6.16E-04	6.16E-04	6.16E-04	6.16E-04
LEAFY VEGETABLE CONSUMPTION	1.24E-04	1.24E-04	8.80E-05	3.24E-04	8.02E-03	0.	1.88E-04
ROOT VEGETABLE CONSUMPTION	2.08E-04	2.08E-04	1.71E-04	5.43E-04	2.10E-04	0.	8.26E-05
MEAT CONSUMPTION	1.71E-03	1.71E-03	1.15E-03	5.00E-03	2.81E-03	0.	1.92E-04
TOTAL	2.73E-03	2.73E-03	2.17E-03	6.81E-03	1.34E-02	3.62E-03	1.18E-03
MILK COW (SSW SECTOR AT 2735. METERS)							
AIR INHALATION	4.11E-05	4.11E-05	8.63E-05	2.05E-04	1.07E-03	1.85E-03	6.38E-05
EXPOSURE TO SOIL	3.57E-04	3.57E-04	3.57E-04	3.57E-04	3.57E-04	3.57E-04	3.57E-04
LEAFY VEGETABLE CONSUMPTION	7.17E-05	7.17E-05	5.12E-05	1.88E-04	4.64E-03	0.	1.09E-04
ROOT VEGETABLE CONSUMPTION	1.21E-04	1.21E-04	1.01E-04	3.15E-04	1.22E-04	0.	4.96E-05
MEAT CONSUMPTION	9.91E-04	9.91E-04	6.68E-04	2.89E-03	1.62E-03	0.	1.11E-04
COW MILK CONSUMPTION	1.14E-04	1.14E-04	8.86E-05	2.12E-04	2.28E-02	1.86E-01	5.09E-04
TOTAL	1.70E-03	1.70E-03	1.35E-03	4.17E-03	3.06E-02	1.89E-01	1.20E-03
MILK GOAT (SOUTH SECTOR AT 3218. METERS)							
AIR INHALATION	4.48E-05	4.48E-05	9.41E-05	2.23E-04	1.18E-03	2.03E-03	6.96E-05
EXPOSURE TO SOIL	5.84E-04	5.84E-04	5.84E-04	5.84E-04	5.84E-04	5.84E-04	5.84E-04
LEAFY VEGETABLE CONSUMPTION	1.16E-04	1.16E-04	8.11E-05	3.06E-04	7.60E-03	0.	1.76E-04
ROOT VEGETABLE CONSUMPTION	1.88E-04	1.88E-04	1.47E-04	5.05E-04	1.83E-04	0.	6.29E-05
MEAT CONSUMPTION	1.62E-03	1.62E-03	1.09E-03	4.73E-03	2.66E-03	0.	1.80E-04
GOAT MILK CONSUMPTION	3.49E-04	3.49E-04	2.17E-04	7.22E-04	4.49E-02	3.67E-01	1.21E-03
TOTAL	2.90E-03	2.90E-03	2.21E-03	7.07E-03	5.71E-02	3.70E-01	2.78E-03

TABLE B-18

2 QUARTER 1980 CONTINUOUS RELEASES

DOSES FROM GASEOUS EFFLUENTS (EXCLUDING
NOBLE GASES) AT MAXIMUM OFFSITE EXPOSURE LOCATIONS
(MREA)

EXPOSURE LOCATION AND PATHWAY	TOTAL BODY	SKIN	LUNG	BONE	ADULT THYROID	INFANT THYROID	OTHER INTERNAL ORGANS
GARDEN (NNW SECTOR AT 966. METERS)							
AIR INHALATION	2.12E-04	2.12E-04	3.58E-04	2.96E-04	1.91E-03	3.12E-03	3.49E-04
EXPOSURE TO SOIL	3.22E-05	3.22E-05	3.22E-05	3.22E-05	3.22E-05	3.22E-05	3.22E-05
LEAFY VEGETABLE CONSUMPTION	6.15E-05	6.15E-05	6.54E-05	1.20E-04	7.44E-03	0.	1.98E-04
ROOT VEGETABLE CONSUMPTION	1.90E-04	1.90E-04	2.71E-04	2.00E-04	3.02E-04	0.	2.42E-04
TOTAL	4.95E-04	4.95E-04	7.26E-04	7.28E-04	9.68E-03	3.16E-03	8.21E-04
MEAT ANIMAL (NNW SECTOR AT 2414. METERS)							
AIR INHALATION	5.13E-05	5.13E-05	8.71E-05	7.18E-05	4.76E-04	7.78E-04	8.49E-05
EXPOSURE TO SOIL	6.77E-06	6.77E-06	6.77E-06	6.77E-06	6.77E-06	6.77E-06	6.77E-06
LEAFY VEGETABLE CONSUMPTION	1.36E-05	1.36E-05	1.49E-05	2.58E-05	1.57E-03	0.	4.27E-05
ROOT VEGETABLE CONSUMPTION	4.45E-05	4.45E-05	6.46E-05	6.35E-05	7.13E-05	0.	5.85E-05
MEAT CONSUMPTION	1.00E-04	1.00E-04	7.18E-05	2.88E-04	3.88E-04	0.	1.36E-05
TOTAL	2.16E-04	2.16E-04	2.45E-04	4.56E-04	2.51E-03	7.85E-04	2.07E-04
MILK COW (SSW SECTOR AT 2735. METERS)							
AIR INHALATION	2.63E-05	2.63E-05	4.47E-05	3.69E-05	2.45E-04	4.02E-04	4.36E-05
EXPOSURE TO SOIL	4.06E-06	4.06E-06	4.06E-06	4.06E-06	4.06E-06	4.06E-06	4.06E-06
LEAFY VEGETABLE CONSUMPTION	7.73E-06	7.73E-06	8.19E-06	1.51E-05	9.39E-04	0.	2.49E-05
ROOT VEGETABLE CONSUMPTION	2.37E-05	2.37E-05	3.37E-05	3.51E-05	3.78E-05	0.	3.01E-05
MEAT CONSUMPTION	5.98E-05	5.98E-05	4.26E-05	1.72E-04	2.32E-04	0.	7.68E-06
COW MILK CONSUMPTION	1.91E-05	1.91E-05	2.41E-05	2.36E-05	4.62E-03	3.77E-02	9.84E-05
TOTAL	1.41E-04	1.41E-04	1.57E-04	2.87E-04	6.07E-03	3.81E-02	2.09E-04
MILK GOAT (SOUTH SECTOR AT 3216. METERS)							
AIR INHALATION	2.80E-05	2.80E-05	4.75E-05	3.92E-05	2.62E-04	4.29E-04	4.64E-05
EXPOSURE TO SOIL	5.93E-06	5.93E-06	5.93E-06	5.93E-06	5.93E-06	5.93E-06	5.93E-06
LEAFY VEGETABLE CONSUMPTION	1.03E-05	1.03E-05	1.02E-05	2.10E-05	1.37E-03	0.	3.46E-05
ROOT VEGETABLE CONSUMPTION	2.75E-05	2.75E-05	3.74E-05	4.41E-05	4.33E-05	0.	3.21E-05
MEAT CONSUMPTION	8.66E-05	8.66E-05	6.09E-05	2.51E-04	3.38E-04	0.	1.00E-05
GOAT MILK CONSUMPTION	3.03E-05	3.03E-05	3.40E-05	4.35E-05	8.07E-03	6.59E-02	1.61E-04
TOTAL	1.89E-04	1.89E-04	1.96E-04	4.04E-04	1.01E-02	6.63E-02	2.90E-04

TABLE B-19

2 QUARTER 1980 BATCH + CONTINUOUS RELEASES

DOSES FROM GASEOUS EFFLUENTS (EXCLUDING
MOBILE GASES) AT MAXIMUM OFFSITE EXPOSURE LOCATIONS
(MREM)

EXPOSURE LOCATION AND PATHWAY	TOTAL BODY	SKIN	LUNG	BONE	ADULT THYROID	INFANT THYROID	OTHER INTERNAL ORGANS
GARDEN MAXIMUM LOCATION							
AIR INHALATION	4.94E-04	4.94E-04	9.47E-04	1.71E-03	9.02E-03	1.54E-02	7.83E-04
EXPOSURE TO SOIL	2.95E-03	2.95E-03	2.95E-03	2.95E-03	2.95E-03	2.95E-03	2.95E-03
LEAFY VEGETABLE CONSUMPTION	6.44E-04	6.44E-04	4.78E-04	1.65E-03	4.54E-02	0.	1.08E-03
ROOT VEGETABLE CONSUMPTION	1.16E-03	1.16E-03	1.05E-03	2.83E-03	1.27E-03	0.	6.04E-04
TOTAL	5.24E-03	5.24E-03	5.43E-03	9.14E-03	5.87E-02	1.84E-02	5.42E-03
MEAT ANIMAL MAXIMUM LOCATION							
AIR INHALATION	1.18E-04	1.18E-04	2.28E-04	4.07E-04	2.22E-03	3.78E-03	1.89E-04
EXPOSURE TO SOIL	6.23E-04	6.23E-04	6.23E-04	6.23E-04	6.23E-04	6.23E-04	6.23E-04
LEAFY VEGETABLE CONSUMPTION	1.38E-04	1.38E-04	1.03E-04	3.50E-04	9.59E-03	0.	2.31E-04
ROOT VEGETABLE CONSUMPTION	2.53E-04	2.53E-04	2.36E-04	6.06E-04	2.81E-04	0.	1.41E-04
MEAT CONSUMPTION	1.81E-03	1.81E-03	1.22E-03	5.29E-03	3.20E-03	0.	2.06E-04
TOTAL	2.95E-03	2.95E-03	2.42E-03	7.27E-03	1.59E-02	4.41E-03	1.39E-03
MILK COW MAXIMUM LOCATION							
AIR INHALATION	6.74E-05	6.74E-05	1.31E-04	2.42E-04	1.32E-03	2.25E-03	1.07E-04
EXPOSURE TO SOIL	3.61E-04	3.61E-04	3.61E-04	3.61E-04	3.61E-04	3.61E-04	3.61E-04
LEAFY VEGETABLE CONSUMPTION	7.94E-05	7.94E-05	5.94E-05	2.03E-04	5.58E-03	0.	1.34E-04
ROOT VEGETABLE CONSUMPTION	1.45E-04	1.45E-04	1.35E-04	3.50E-04	1.61E-04	0.	7.97E-05
MEAT CONSUMPTION	1.05E-03	1.05E-03	7.11E-04	3.06E-03	1.85E-03	0.	1.19E-04
COW MILK CONSUMPTION	1.33E-04	1.33E-04	1.13E-04	2.36E-04	2.74E-02	2.24E-01	6.07E-04
TOTAL	1.84E-03	1.84E-03	1.51E-03	4.46E-03	3.67E-02	2.27E-01	1.41E-03
MILK GOAT MAXIMUM LOCATION							
AIR INHALATION	7.28E-05	7.28E-05	1.42E-04	2.62E-04	1.44E-03	2.46E-03	1.16E-04
EXPOSURE TO SOIL	5.90E-04	5.90E-04	5.90E-04	5.90E-04	5.90E-04	5.90E-04	5.90E-04
LEAFY VEGETABLE CONSUMPTION	1.26E-04	1.26E-04	9.13E-05	3.27E-04	8.97E-03	0.	2.11E-04
ROOT VEGETABLE CONSUMPTION	2.16E-04	2.16E-04	1.84E-04	5.49E-04	2.26E-04	0.	9.50E-05
MEAT CONSUMPTION	1.71E-03	1.71E-03	1.15E-03	4.98E-03	3.00E-03	0.	1.90E-04
GOAT MILK CONSUMPTION	3.79E-04	3.79E-04	2.51E-04	7.65E-04	5.30E-02	4.33E-01	1.37E-03
TOTAL	3.09E-03	3.09E-03	2.41E-03	7.47E-03	6.72E-02	4.36E-01	2.57E-03

TABLE B-20
 SECOND QUARTER 1980
 BATCH + CONTINUOUS RELEASES

POPULATION DOSE (50-MILE) FROM
 GASEOUS EFFLUENTS
 (MAN-REM)

EXPOSURE PATHWAY	TOTAL BODY	THYROID
AIR SUBMERSION	1.4E-02	1.2E-02
AIR INHALATION	3.4E-03	6.5E-02
EXPOSURE TO SOIL	7.5E-03	7.5E-03
LEAFY VEGETABLE CONSUMPTION	6.2E-05	4.1E-03
ROOT VEGETABLE CONSUMPTION	1.4E-04	1.7E-04
MEAT CONSUMPTION	6.1E-03	1.0E-02
MILK CONSUMPTION	2.7E-03	5.6E-01
TOTAL	3.4E-02	6.6E-01
AVERAGE DOSE (MREM/PERSON)	1.7E-05	3.2E-04

C. METEOROLOGICAL DATA

Meteorological data for the first and second quarter 1980 are presented in this section. Included are quarterly joint frequency distributions of ground-level wind and atmospheric stability for batch and continuous releases. Also included are quarterly tables of atmospheric dispersion, deposition and depletion factors that have been calculated from these joint frequency distributions. Meteorological models and assumptions used in performing the analyses are presented in Section 2.3 of the Trojan FSAR.

TABLE C-1

TROJAN
DISTANCES FOR GASEOUS RADIOACTIVE
EFFLUENT EVALUATION*
(Meters)

<u>Receptor Direction</u>	<u>Site Boundary</u>	<u>Nearest Residence</u>	<u>Nearest Garden</u>	<u>Nearest Meat Animal</u>	<u>Nearest Milk Cow</u>	<u>Nearest Milk Goat</u>
N	663	692	6436	6436	>8045	6436
NNE	683	2694	3700	3700	>8045	4022
NE	820	2731	2896	2896	>8045	3218
ENE	688	3438	4022	4827	6919	>8045
E	677	960	2414	2735	>8045	>8045
ESE	805	945	4827	4827	>8045	8045
SE	1006	3822	7241	7563	>8045	6436
SSE	1649	2079	>8045	>8045	>8045	>8045
S	1332	1765	2092	6436	>8045	3218
SSW	1241	1804	2575	2735	2735	4827
SW	1320	1609	2414	2414	>8045	6436
WSW	1394	2518	1287	1287	>8045	>8045
W	951	1804	2575	3539	>8045	4827
WNW	1021	2765	2575	2575	>8045	6758
NW	814	3267	1690	7241	>8045	>8045
NNW	674	768	966	2414	>8045	3218

* The distances presented in this table are taken from the annual survey of agriculture production and from Table 2.1-7 of the Trojan FSAR.

TABLE C-2

TYROJAN

First Quarter 1980 Continuous Release Average X/Q Values (sec/m³)

Receptor Direction	Downwind Distance From Release (miles)													
	0.5	1.5	2.5	3.5	4.5	7.5	15.0	25.0	35.0	45.0	55.0			
N	8.0-6	1.8-6	8.8-7	5.5-7	3.8-7	1.9-7	7.2-8	3.6-8	2.3-8	1.6-8	1.2-8			
NNE	7.0-6	1.5-6	6.5-7	4.1-7	2.9-7	1.4-7	5.7-8	2.9-8	1.8-8	1.3-8	1.0-8			
NE	5.7-6	1.2-6	4.6-7	2.9-7	2.0-7	9.9-8	3.8-8	1.9-8	1.2-8	8.7-9	6.7-9			
ENE	4.4-6	9.0-7	3.0-7	1.6-7	1.1-7	5.4-8	2.1-8	1.1-8	6.8-9	4.8-9	3.7-9			
E	3.2-6	6.6-7	2.7-7	1.3-7	7.1-8	3.5-8	1.4-8	6.9-9	4.4-9	3.1-9	2.4-9			
ESE	3.7-6	7.8-7	3.2-7	1.7-7	8.4-8	4.1-8	1.6-8	8.0-9	5.1-9	3.6-9	2.8-9			
SE	7.5-6	1.7-6	7.8-7	4.1-7	2.6-7	1.3-7	5.0-8	2.5-8	1.6-8	1.1-8	8.6-9			
SSE	5.5-6	1.1-6	5.4-7	3.4-7	2.4-7	1.2-7	4.5-8	2.2-8	1.4-8	1.0-8	7.7-9			
S	2.7-6	5.4-7	2.5-7	1.6-7	1.1-7	5.2-8	1.9-8	9.6-9	6.1-9	4.3-9	3.3-9			
SSW	1.2-6	2.5-7	1.2-7	7.4-8	5.2-8	2.5-8	9.6-9	4.8-9	3.0-9	2.2-9	1.7-9			
SW	3.5-7	6.3-8	2.4-8	1.6-8	9.8-9	4.5-9	1.5-9	7.1-10	4.3-10	2.9-10	2.2-10			
WSW	3.8-7	6.7-8	2.3-8	1.4-8	9.9-9	4.8-9	1.8-9	8.7-10	5.4-10	3.8-10	2.9-10			
W	6.2-7	8.6-8	2.7-8	1.7-8	1.2-8	5.9-9	2.3-9	1.1-9	7.3-10	5.3-10	4.1-10			
WNW	5.9-7	9.1-8	3.1-8	1.8-8	1.1-8	5.1-9	1.7-9	7.9-10	4.7-10	3.2-10	2.4-10			
NW	4.4-6	8.8-7	3.3-7	2.0-7	1.3-7	6.3-8	2.4-8	1.2-8	7.4-9	5.2-9	4.0-9			
NNW	9.3-6	1.9-6	8.3-7	5.2-7	3.7-7	1.8-7	7.1-8	3.6-8	2.3-8	1.7-8	1.3-8			

NOTE: 0.8-6 = 6.0x10⁻⁶

TABLE C-3

TROJ/W

First Quarter 1980 Continuous Release Average D/Q Values ($1/m^2$)

Receptor Direction	Downwind Distance From Release (miles)										
	0.5	1.5	2.5	3.5	4.5	7.5	15.0	25.0	35.0	45.0	55.0
N	4.1-8	6.4-9	2.6-9	1.4-9	9.2-10	3.7-10	1.2-10	4.8-11	2.6-11	1.6-11	1.1-11
NNE	2.1-8	3.3-9	1.2-9	6.8-10	4.3-10	1.7-10	5.5-11	7.2-11	1.2-11	7.5-12	5.1-12
NE	1.1-8	1.7-9	5.2-10	2.9-10	1.8-10	7.5-11	2.4-11	9.6-12	5.2-12	3.2-12	2.2-12
ENE	7.8-9	1.2-9	3.4-10	1.5-10	9.9-11	4.0-11	1.3-11	5.1-12	2.8-12	1.7-12	1.2-12
E	7.2-9	1.1-9	3.9-10	1.7-10	8.2-11	3.3-11	1.0-11	4.3-12	2.3-12	1.4-12	9.6-13
ESE	8.9-9	1.4-9	4.9-10	2.2-10	1.0-10	4.1-11	1.3-11	5.2-12	2.8-12	1.7-12	1.2-12
SE	1.8-8	3.0-9	1.2-9	5.4-10	3.1-10	1.3-10	4.0-11	1.6-11	8.7-12	5.4-12	3.7-12
SSE	2.0-8	3.1-9	1.3-9	7.1-10	4.5-10	1.8-10	5.8-11	2.4-11	1.3-11	7.9-12	5.3-12
S	1.6-8	2.6-9	1.1-9	5.0-10	3.7-10	1.5-10	4.8-11	1.9-11	1.0-11	6.4-12	4.4-12
SSW	4.9-9	7.7-10	3.2-10	1.7-10	1.1-10	4.5-11	1.4-11	5.8-12	3.1-12	1.9-12	1.3-12
SW	1.2-9	1.7-10	5.9-11	3.6-11	2.1-11	8.5-12	2.7-12	1.1-12	5.9-13	3.6-13	2.5-13
WSW	6.3-10	8.2-11	2.4-11	1.3-11	8.4-12	3.4-12	1.1-12	4.4-13	2.4-13	1.5-13	9.9-14
W	1.3-9	1.5-10	4.2-11	2.3-11	1.5-11	5.9-12	1.9-12	7.6-13	4.1-13	2.5-13	1.7-13
WNW	1.9-9	2.4-10	7.2-11	4.0-11	2.3-11	9.3-12	3.0-12	1.2-12	6.4-13	4.0-13	2.7-13
NW	2.3-8	3.6-9	1.2-9	6.4-10	3.7-10	1.5-10	4.8-11	1.9-11	1.0-11	6.4-12	4.4-12
NNW	4.6-8	7.2-9	2.7-9	1.5-9	9.4-10	3.8-10	1.2-10	4.9-11	2.6-11	1.6-11	1.1-11

Note: 4.1-8 = 4.1×10^{-8}

TABLE C-4

TROJAN

First Quarter 1980 Continuous Release Average X/Q Values (sec/m^3)
 Deposition (m^{-2}) and Plume Depletion Factor at Offsite Exposure Locations

Sector Direction	Wind Direction	Wind (a)	Site Boundary	Nearest Cows	Nearest Goats	Nearest Cattle	Nearest Sheep	Nearest Vegetable Garden	Nearest Residence
N	S	X/Q	1.2-5	3.3-7	4.5-7	4.5-7	3.3-7	4.5-7	1.1-5
		D/Q	5.5-8	7.6-10	1.1-9	1.1-9	7.6-10	1.1-9	5.2-7
		PDF	0.92	0.75	0.77	0.77	0.75	0.77	0.92
NNE	SSW	X/Q	9.2-6	2.5-7	6.5-7	7.3-7	2.5-7	7.3-7	1.3-6
		D/Q	2.7-8	3.6-10	1.2-9	1.4-9	3.6-10	1.4-9	2.7-9
		PDF	0.92	0.75	0.81	0.82	0.75	0.82	0.84
NE	SW	X/Q	5.6-6	1.7-7	8.1-7	9.4-7	1.7-7	9.4-7	1.0-6
		D/Q	1.0-8	1.5-10	1.0-9	1.2-9	1.5-10	1.2-9	1.3-9
		PDF	0.91	0.75	0.83	0.84	0.75	0.84	0.84
ENE	WSW	X/Q	5.6-6	1.2-7	9.5-8	2.3-7	9.5-8	3.0-7	3.7-7
		D/Q	1.0-8	1.1-10	8.2-11	2.4-10	8.2-11	3.4-10	4.4-10
		PDF	0.92	0.76	0.75	0.79	0.75	0.81	0.82
E	W	X/Q	4.2-6	6.2-8	6.2-8	5.5-7	3.1-7	6.6-7	2.5-6
		D/Q	9.5-9	6.8-11	6.8-11	9.1-10	4.6-10	1.1-9	5.4-9
		PDF	0.92	0.75	0.75	0.84	0.82	0.85	0.90
ESE	WNW	X/Q	3.7-6	7.3-8	7.3-8	2.5-7	7.3-8	2.5-7	2.9-6
		D/Q	8.8-9	8.3-11	8.3-11	3.5-10	8.3-11	3.5-10	6.8-9
		PDF	0.91	0.75	0.75	0.79	0.75	0.79	0.90
SE	NW	X/Q	5.5-6	2.3-7	3.4-7	2.5-7	2.5-7	2.6-7	8.3-7
		D/Q	1.2-8	2.6-10	4.2-10	2.9-10	2.9-10	3.1-10	1.3-9
		PDF	0.90	0.75	0.77	0.75	0.75	0.76	0.81
SSE	NNW	X/Q	1.9-6	2.0-7	2.0-7	2.0-7	2.0-7	2.0-7	1.4-6
		D/Q	6.0-9	3.7-10	3.7-10	3.7-10	3.7-10	3.7-10	4.1-9
		PDF	0.87	0.75	0.75	0.75	0.75	0.75	0.86
S	N	X/Q	1.3-6	9.3-8	3.5-7	1.3-7	9.3-8	6.7-7	8.6-7
		D/Q	7.1-9	3.1-10	1.6-9	4.6-10	3.1-10	3.3-9	4.4-9
		PDF	0.89	0.75	0.83	0.77	0.75	0.86	0.87
SSW	NNE	X/Q	6.4-7	2.1-7	9.2-8	2.1-7	4.5-8	2.3-7	3.7-7
		D/Q	2.4-9	6.2-10	2.3-10	6.2-10	9.2-11	6.9-10	1.3-9
		PDF	0.89	0.84	0.79	0.84	0.75	0.84	0.87
SW	NE	X/Q	1.7-7	8.3-9	1.3-8	6.3-8	6.3-8	6.3-8	1.3-7
		D/Q	5.3-10	1.7-11	2.8-11	1.7-10	1.7-10	1.7-10	3.8-10
		PDF	0.89	0.75	0.77	0.85	0.85	0.85	0.88
WSW	ENE	X/Q	1.8-7	8.5-9	8.5-9	2.0-7	1.4-8	2.0-7	6.3-8
		D/Q	2.5-10	7.0-12	7.0-12	2.9-10	1.3-11	2.9-10	7.6-11
		PDF	0.88	0.75	0.75	0.89	0.78	0.89	0.85
W	E	X/Q	4.8-7	1.0-8	2.1-8	3.3-8	1.0-8	7.8-8	1.3-7
		D/Q	9.8-10	1.2-11	3.0-11	5.2-11	1.2-11	1.4-10	2.5-10
		PDF	0.90	0.75	0.79	0.82	0.75	0.84	0.87
WNW	ESE	X/Q	4.2-7	9.5-9	1.2-8	8.3-8	9.5-9	8.3-8	7.4-8
		D/Q	1.3-9	1.9-11	2.6-11	2.1-10	1.9-11	2.1-10	1.9-10
		PDF	0.90	0.75	0.76	0.84	0.75	0.84	0.84
NW	SE	X/Q	4.3-6	1.1-7	1.1-7	1.3-7	1.1-7	1.6-6	4.5-7
		D/Q	2.2-8	3.1-7	3.1-10	3.7-10	3.1-10	7.2-9	1.7-9
		PDF	0.91	0.75	0.75	0.76	0.75	0.88	0.83
NNW	SSE	X/Q	1.2-5	3.2-7	1.3-6	1.9-6	3.2-7	7.1-6	1.0-5
		D/Q	6.1-8	7.8-10	4.4-9	7.2-9	7.8-10	3.4-8	4.9-8
		PDF	0.92	0.75	0.83	0.85	0.75	0.90	0.92

(a) Direction from which the wind blows.

C-5

Note: 1.2-5 = 1.2×10^{-5}

TABLE C-5

First Quarter
Continuous Releases
Joint Frequency Distributions

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	WW	MMW	MMV	MMV	MMV	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.34- 0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51- 0.75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.76- 1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.01- 1.50	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1.51- 2.00	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7
2.01- 3.00	3	2	0	0	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	16
3.01- 5.00	13	4	0	0	0	0	6	7	3	0	0	0	1	0	0	0	0	0	0	39
5.01- 7.00	4	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	13
7.01-10.00	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	22	6	0	0	0	0	13	14	6	0	0	0	1	0	0	0	0	0	0	81

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	WW	MMW	MMV	MMV	MMV	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.34- 0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51- 0.75	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0.76- 1.00	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
1.01- 1.50	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3
1.51- 2.00	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	5
2.01- 3.00	3	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	7
3.01- 5.00	8	0	0	0	0	0	3	0	2	1	0	0	1	0	0	0	0	0	0	25
5.01- 7.00	2	0	0	0	0	0	0	6	2	0	0	0	0	0	0	0	0	0	0	10
7.01-10.00	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	15	1	0	0	0	0	3	17	7	1	0	0	2	3	0	0	0	0	0	56

TABLE C-5
 First Quarter
 Continuous Releases
 Joint Frequency Distributions

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
 WIND MEASURED AT: 33.0 FEET
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/SL	N	MNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	MNW	TOTAL
0.34- 0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51- 0.75	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
0.76- 1.00	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
1.01- 1.50	2	1	0	0	0	0	0	0	6	1	0	0	0	0	1	0	6
1.51- 2.00	1	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	4
2.01- 3.00	2	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	14
3.01- 5.00	7	6	0	0	0	0	4	11	5	1	0	0	0	0	0	4	38
5.01- 7.00	2	1	0	0	0	0	0	6	1	0	0	0	0	0	0	0	11
7.01-10.00	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	15	8	0	0	0	0	8	24	10	2	1	2	2	0	2	9	83

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
 WIND MEASURED AT: 33.0 FEET
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/SL	N	MNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	MNW	TOTAL
0.34- 0.50	0	1	0	0	1	0	0	1	0	0	2	1	0	0	1	0	7
0.51- 0.75	0	0	2	0	0	1	6	0	4	2	1	3	2	1	2	2	26
0.76- 1.00	5	0	0	1	1	3	7	5	6	3	0	3	1	3	9	7	62
1.01- 1.50	13	3	4	1	3	4	9	7	10	4	1	3	4	3	15	26	110
1.51- 2.00	13	3	1	0	0	1	10	12	16	10	3	1	1	1	6	11	89
2.01- 3.00	14	10	2	0	0	2	12	33	30	18	5	1	2	1	6	22	158
3.01- 5.00	37	5	0	0	0	0	25	101	135	27	1	0	0	1	2	17	351
5.01- 7.00	6	1	0	0	0	0	2	43	40	10	0	0	0	1	1	15	121
7.01-10.00	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	4
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	90	23	9	2	5	11	77	205	243	74	21	12	10	11	42	100	929

TABLE C-5

First Quarter
Continuous Releases
Joint Frequency Distributions

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED IN/51 CALM	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.34- 0.50	1	1	0	0	0	0	0	2	5	7	10	18	2	1	0	2	38
0.51- 0.75	3	2	0	0	0	0	1	11	17	10	16	16	4	5	11	9	97
0.76- 1.00	5	2	0	0	0	0	3	9	18	13	9	9	5	6	14	6	96
1.01- 1.50	4	1	0	0	0	0	10	15	20	31	6	6	7	2	8	23	137
1.51- 2.00	0	3	0	0	0	0	5	15	10	5	1	1	0	4	18	13	83
2.01- 3.00	7	2	1	0	1	0	11	31	28	20	7	2	2	0	4	9	125
3.01- 5.00	5	2	0	0	0	0	29	38	35	29	3	1	0	1	1	2	146
5.01- 7.00	0	0	0	0	0	0	2	7	5	7	0	0	0	1	0	0	22
7.01-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	31	13	1	0	0	0	61	128	138	101	52	23	19	28	84	64	797

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED IN/51 CALM	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.34- 0.50	0	2	0	0	0	0	0	3	1	3	0	0	3	1	0	3	18
0.51- 0.75	1	0	0	0	0	0	1	4	4	15	7	2	1	2	7	3	47
0.76- 1.00	1	0	0	0	0	0	0	8	7	4	2	2	0	5	2	3	32
1.01- 1.50	0	0	0	0	0	0	1	15	7	1	2	1	2	1	5	4	39
1.51- 2.00	0	0	0	0	0	0	4	6	4	0	1	2	0	0	1	2	20
2.01- 3.00	0	0	0	0	0	0	4	10	5	1	1	0	0	0	2	1	24
3.01- 5.00	0	0	0	0	0	0	0	5	3	2	0	0	0	0	0	0	10
5.01- 7.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.01-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2	2	0	0	0	0	10	51	31	26	13	10	4	6	19	16	199

First Quarter
Continuous Releases
Joint Frequency Distributions

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/SL	M	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.34- 0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51- 0.75	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	4
0.76- 1.00	2	0	0	0	1	0	0	2	1	0	1	0	1	0	0	0	9
1.01- 1.50	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	3
1.51- 2.00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
2.01- 3.00	0	0	0	0	0	0	2	7	2	0	0	0	0	0	1	0	12
3.01- 5.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.01- 7.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.01-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2	0	0	0	1	0	3	11	5	2	1	0	1	0	1	2	29

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/SL	M	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.34- 0.50	1	4	0	1	1	0	0	6	6	10	42	6	2	1	8	5	63
0.51- 0.75	5	2	2	1	0	1	8	15	27	28	25	11	8	8	28	15	176
0.76- 1.00	12	3	0	1	2	3	10	24	33	20	20	11	8	14	25	18	204
1.01- 1.50	19	5	4	1	3	4	22	39	37	17	9	12	9	13	52	54	300
1.51- 2.00	25	6	1	0	0	1	20	34	32	15	5	3	7	6	27	33	215
2.01- 3.00	29	14	3	0	1	2	38	90	66	39	13	3	4	2	13	37	354
3.01- 5.00	70	17	0	0	0	0	75	170	183	60	9	1	1	2	3	31	617
5.01- 7.00	16	2	0	0	0	0	4	65	48	17	0	0	0	2	1	22	177
7.01-10.00	0	0	0	0	0	0	0	7	7	0	0	0	0	0	0	1	15
10.01-13.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	177	53	10	4	7	11	177	450	440	296	88	47	39	48	149	216	2124

TABLE C-6

THOJAN

First Quarter 1980 Batch Releases Average X/Q Values (sec/m³)

Receptor Direction	Downwind Distance From Release (miles)										
	0.5	1.5	2.5	3.5	4.5	7.5	15.0	25.0	35.0	45.0	55.0
N	1.0-5	2.2-6	1.0-6	6.5-7	4.5-7	2.2-7	8.3-8	4.1-8	2.6-8	1.8-8	1.4-8
NNE	4.3-6	9.2-7	4.1-7	2.5-7	1.8-7	8.8-8	3.4-8	1.7-8	1.1-8	7.5-9	5.7-9
NE	4.1-6	9.1-7	3.4-7	2.1-7	1.5-7	7.1-8	2.7-8	1.3-8	8.3-9	5.9-9	4.5-9
ENE	1.7-6	3.6-7	1.2-7	6.1-8	4.3-8	2.1-8	8.0-9	4.0-9	2.5-9	1.8-9	1.4-9
E	1.9-6	4.0-7	1.6-7	7.7-8	4.1-8	2.0-8	7.4-9	3.6-9	2.3-9	1.6-9	1.2-9
ESE	2.9-6	6.2-7	2.6-7	1.3-7	6.7-8	3.3-8	1.3-8	6.3-9	4.0-9	2.9-9	2.2-9
SE	4.9-6	1.1-6	4.9-7	2.5-7	1.6-7	7.6-8	2.8-8	1.4-8	8.5-9	5.9-9	4.5-9
SSE	2.8-6	5.7-7	2.7-7	1.7-7	1.2-7	5.5-8	2.0-8	9.8-9	6.1-9	4.3-9	3.3-9
S	3.0-6	6.1-7	2.8-7	1.7-7	1.2-7	5.5-8	2.0-8	9.3-9	5.7-9	4.0-9	3.0-9
SSW	1.4-6	3.1-7	1.5-7	9.1-8	6.3-8	3.0-8	1.1-8	5.6-9	3.5-9	2.5-9	1.9-9
SW	3.9-7	7.1-8	2.7-8	1.8-8	1.1-8	4.9-9	1.7-9	7.7-10	4.6-10	3.1-10	2.3-10
WSW	8.7-7	1.5-7	5.3-8	3.3-8	2.3-8	1.1-8	4.1-9	2.0-9	1.2-9	8.8-10	6.6-10
W	1.3-6	2.0-7	6.0-8	3.5-8	2.4-8	1.1-8	3.7-9	1.7-9	1.0-9	6.9-10	5.1-10
WNW	4.1-7	6.4-8	2.1-8	1.3-8	7.8-9	3.5-9	1.2-9	5.5-10	3.3-10	2.2-10	1.7-10
NW	5.9-6	1.2-6	4.5-7	2.8-7	1.8-7	8.6-8	3.3-8	1.6-8	1.0-8	7.4-9	5.7-9
NNW	1.2-5	2.4-6	1.0-6	6.5-7	4.6-7	2.3-7	8.9-8	4.5-8	2.9-8	2.1-8	1.6-8

Note: 1.0-5 = 1.0x10⁻⁵

TABLE C-7

TROJAN

First Quarter 1980 Batch Releases Average D/Q Values ($1/m^2$)

Receptor Direction	Downwind Distance From Release (miles)										
	0.5	1.5	2.5	3.5	4.5	7.5	15.0	25.0	35.0	45.0	55.0
N	4.6-8	7.2-9	3.0-9	1.6-9	1.0-9	4.2-10	1. -10	5.4-11	2.9-11	1.8-11	1.2-11
NNE	1.3-8	2.1-9	7.6-10	4.2-10	2.7-10	1.1-10	3.5-11	1.4-11	7.5-12	4.7-12	3.2-12
NE	0.4-9	1.3-9	4.2-10	2.3-10	1.5-10	5.9-11	1.9-11	7.6-12	4.1-12	2.6-12	1.7-12
ENE	3.9-9	6.1-10	1.7-10	7.7-11	4.9-11	2.0-11	6.3-12	2.6-12	1.4-12	8.5-13	5.8-13
E	5.4-9	8.5-10	3.0-10	1.2-10	6.1-11	2.5-11	7.9-12	3.2-12	1.7-12	1.1-12	7.2-13
ESE	3.5-9	1.0-9	3.5-10	1.6-10	7.3-11	3.0-11	9.4-12	3.8-12	2.1-12	1.3-12	8.7-13
SE	1.2-8	2.0-9	7.7-10	3.6-10	2.1-10	8.4-11	2.7-11	1.1-11	5.8-12	3.6-12	2.5-12
SSE	1.2-8	1.9-9	7.6-10	4.2-10	2.7-10	1.1-10	3.5-11	1.4-11	7.5-12	4.7-12	3.2-12
S	1.7-8	2.6-9	1.1-9	5.9-10	3.8-10	1.5-10	4.9-11	2.0-11	1.1-11	6.6-12	4.5-12
SSW	7.0-9	1.1-9	4.5-10	2.5-10	1.6-10	6.4-11	2.0-11	8.3-12	4.5-12	2.8-12	1.9-12
SW	7.0-10	1.0-10	3.5-11	2.1-11	1.2-11	5.0-12	1.6-12	6.4-13	3.4-13	2.1-13	1.4-13
WSW	1.8-9	2.4-10	7.0-11	3.8-11	2.4-11	1.0-11	3.1-12	1.3-12	6.9-13	4.3-13	2.9-13
W	2.2-9	2.5-10	7.0-11	3.8-11	2.4-11	1.0-11	3.1-12	1.3-12	6.9-13	4.3-13	2.9-13
WNW	1.0-9	1.3-10	3.8-11	2.1-11	1.2-11	5.0-12	1.6-12	6.4-13	3.4-13	2.1-13	1.4-13
NW	2.6-8	4.2-9	1.3-9	7.4-10	4.3-10	1.7-10	5.5-11	2.2-11	1.2-11	7.5-12	5.1-12
NNW	6.2-8	9.8-9	3.7-9	2.0-9	1.3-9	5.2-10	1.6-10	6.7-11	3.6-11	2.2-11	1.5-11

Note: 4.6-8 = 4.6×10^{-8}

TABLE C-8

TROJAN

First Quarter 1980 Batch Releases Average X/Q Values (sec/m^3)
Deposition (m^{-2}) and Plume Depletion Factor at Offsite Exposure Locations

Sector Direction	Wind Direction		Site Boundary	Nearest Cows	Nearest Goats	Nearest Cattle	Nearest Sheep	Nearest Vegetable Garden	Nearest Residence
N	S	X/Q	1.4-5	3.9-7	5.4-7	5.4-7	3.9-7	5.4-7	1.3-5
		D/Q	6.3-8	8.6-10	1.3-9	1.3-9	8.6-10	1.3-9	5.8-8
		PDF	0.92	0.75	0.77	0.77	0.75	0.77	0.92
NNE	SSW	X/Q	5.5-6	1.5-7	4.1-7	4.6-7	1.5-7	4.6-7	7.9-7
		D/Q	1.7-8	2.2-10	7.5-10	8.9-10	2.2-10	8.9-10	1.7-9
		PDF	0.92	0.75	0.81	0.82	0.75	0.82	0.84
NE	SW	X/Q	4.0-6	1.3-7	6.0-7	7.0-7	1.3-7	7.0-7	7.6-7
		D/Q	8.2-9	1.2-10	8.0-10	9.6-10	1.2-10	9.6-10	1.1-9
		PDF	0.91	0.75	0.83	0.84	0.75	0.84	0.84
ENE	WSW	X/Q	2.2-6	4.6-8	3.7-8	9.1-8	3.7-8	1.2-7	1.5-7
		D/Q	3.0-9	5.3-11	4.0-11	1.2-10	4.0-11	1.7-10	2.2-10
		PDF	0.92	0.76	0.75	0.79	0.75	0.81	0.82
E	W	X/Q	3.4-6	3.5-8	3.7-8	3.4-7	1.9-7	4.0-7	1.5-6
		D/Q	7.1-9	5.1-11	5.1-11	6.8-10	3.4-10	8.5-10	4.0-9
		PDF	0.92	0.75	0.75	0.84	0.82	0.85	0.90
ESE	WNW	X/Q	2.9-7	5.8-8	5.8-8	2.0-7	5.8-8	2.0-7	2.3-6
		D/Q	6.5-9	6.1-11	6.1-11	2.6-10	6.1-11	2.6-10	5.0-7
		PDF	0.91	0.75	0.75	0.79	0.75	0.79	0.90
SE	NW	X/Q	3.6-6	1.4-7	2.1-7	1.5-7	1.5-7	1.6-7	5.3-7
		D/Q	8.3-9	1.7-10	2.8-10	1.9-10	1.9-10	2.1-10	8.4-10
		PDF	0.90	0.75	0.77	0.75	0.75	0.76	0.81
SSE	NNW	X/Q	1.0-6	9.9-8	9.9-8	9.5-8	1.0-7	9.9-8	7.1-7
		D/Q	3.6-9	2.2-10	2.2-10	2.2-10	2.2-10	2.2-10	2.4-9
		PDF	0.87	0.75	0.75	0.75	0.75	0.75	0.86
S	N	X/Q	1.5-6	1.0-7	4.0-7	1.4-7	1.0-7	7.5-7	9.7-7
		D/Q	7.3-9	3.1-10	1.6-9	4.7-10	3.1-10	3.4-9	4.5-9
		PDF	0.89	0.75	0.83	0.77	0.75	0.86	0.87
SSW	NNE	X/Q	8.0-7	2.6-7	1.1-7	2.6-7	5.4-8	2.8-7	4.7-7
		D/Q	3.4-9	8.9-10	3.3-10	8.9-10	1.3-10	9.9-10	1.8-9
		PDF	0.89	0.84	0.77	0.84	0.75	0.84	0.87
SW	NE	X/Q	1.9-7	9.3-9	1.4-8	7.1-8	7.1-8	7.1-8	1.4-7
		D/Q	3.1-10	1.0-11	1.7-11	1.0-10	1.0-10	1.0-10	2.2-10
		PDF	0.89	0.75	0.77	0.85	0.85	0.85	0.87
WSW	ENE	X/Q	4.1-7	2.0-8	2.0-8	4.6-7	3.3-8	4.6-7	1.5-7
		D/Q	7.4-10	2.0-11	2.0-11	8.4-10	3.8-11	8.4-10	2.2-10
		PDF	0.88	0.75	0.75	0.89	0.78	0.89	0.85
W	E	X/Q	1.1-6	2.0-8	4.5-8	7.3-8	2.0-8	1.8-7	3.1-7
		D/Q	1.6-9	2.0-11	5.0-11	8.7-11	2.0-11	2.3-10	4.2-10
		PDF	0.90	0.75	0.79	0.82	0.75	0.84	0.87
WNW	ESE	X/Q	2.9-7	6.6-9	8.7-9	5.8-8	6.6-9	5.8-8	5.2-8
		D/Q	7.0-10	1.0-11	1.4-11	1.1-10	1.0-11	1.0-10	1.0-10
		PDF	0.90	0.75	0.76	0.84	0.75	0.84	0.84
NW	SE	X/Q	5.8-6	1.5-7	1.5-7	1.9-7	1.5-7	2.1-6	6.0-7
		D/Q	2.6-8	3.5-10	3.5-10	1.8-7	3.5-7	8.3-9	1.9-9
		PDF	0.91	0.75	0.75	0.76	0.75	0.88	0.83
NNW	SSE	X/Q	1.6-5	4.0-7	1.6-6	2.4-6	4.0-7	9.1-6	1.3-5
		D/Q	8.3-8	1.1-9	5.9-9	9.8-9	1.1-9	4.6-8	6.7-8
		PDF	0.92	0.75	0.83	0.85	0.75	0.90	0.92

(a) Direction from which the wind blows.
Note: $1.4-5 = 1.4 \times 10^{-5}$

TABLE C-9
Second Quarter
Continuous Releases
Joint Frequency Distributions

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	MNW	IOIAL
0.34-0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51-0.75	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
0.76-1.00	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	4
1.01-1.50	3	4	0	2	0	0	0	2	2	0	0	0	0	0	2	3	19
1.51-2.00	9	1	1	1	1	2	11	3	0	0	0	0	0	0	0	2	32
2.01-3.00	12	12	3	2	0	3	25	3	0	0	0	0	0	0	0	6	66
3.01-5.00	77	19	1	0	0	0	28	27	0	0	0	0	1	0	1	48	208
5.01-7.00	40	1	1	0	0	0	6	9	0	0	0	0	0	0	0	23	80
7.01-10.00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	144	59	12	5	1	5	71	44	2	1	0	0	2	0	3	82	412

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	MNW	IOIAL
0.34-0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51-0.75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.76-1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.01-1.50	2	1	1	0	3	2	1	0	0	0	0	0	0	0	0	2	12
1.51-2.00	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	1	5
2.01-3.00	4	4	0	0	0	0	5	1	1	0	0	0	0	0	1	1	17
3.01-5.00	16	0	2	0	0	1	4	19	0	0	0	0	0	0	1	10	53
5.01-7.00	11	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5	17
7.01-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	34	7	3	0	3	3	11	21	1	0	0	0	2	0	2	19	104

TABLE C-9
Second Quarter
Continuous Releases
Joint Frequency Distributions

STABILITY CLASS C

STABILITY BASED ON: DELTA T
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/2.5 CALM	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	MNW	NW	MNW	INITIAL
0.34-0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51-0.75	0	1	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0.76-1.00	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
1.01-1.50	4	1	0	1	1	0	6	1	0	1	0	0	1	0	0	0	2
1.51-2.00	2	2	1	0	0	0	1	0	0	0	0	0	0	0	0	3	9
2.01-3.00	5	1	0	0	0	0	8	1	1	0	0	0	0	0	0	3	24
3.01-5.00	12	3	0	0	0	2	13	0	0	0	0	0	0	0	1	14	45
5.01-7.00	6	1	0	0	0	0	3	0	0	0	0	0	0	0	0	4	14
7.01-10.00	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	4
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	50	13	6	1	1	0	18	22	1	1	0	0	1	0	1	27	122

STABILITY CLASS D

STABILITY BASED ON: DELTA T
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/2.5 CALM	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	MNW	NW	MNW	INITIAL
0.34-0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51-0.75	2	2	2	0	1	2	3	4	4	3	1	0	0	0	2	2	28
0.76-1.00	0	4	0	4	1	4	3	3	0	3	1	1	2	0	0	9	67
1.01-1.50	16	13	5	3	1	4	8	10	12	6	2	1	4	5	13	14	115
1.51-2.00	27	18	2	1	0	10	4	14	14	2	1	1	0	1	11	14	106
2.01-3.00	40	45	3	0	0	1	5	23	32	8	3	2	2	4	23	23	214
3.01-5.00	52	29	2	0	0	0	9	52	30	6	1	2	1	14	27	52	279
5.01-7.00	9	1	0	0	0	0	4	23	2	0	0	0	0	0	11	24	83
7.01-10.00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	10
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	159	112	12	8	4	11	42	119	102	28	10	7	10	47	95	144	905

TABLE C-9

Second Quarter
 Continuous Releases
 Joint Frequency Distributions

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
 WIND MEASURED AT: 33.0 FEET
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	1	3	2	1	1	0	25
0.34- 0.50	1	0	0	0	1	0	3	3	12	15	18	10	5	6	5	2	81
0.51- 0.75	2	0	1	0	2	1	3	3	11	6	11	7	3	2	4	5	61
0.76- 1.00	5	3	4	0	1	0	6	7	18	13	9	1	1	7	16	10	101
1.01- 1.50	6	4	2	0	1	0	3	6	11	11	5	1	1	2	16	9	77
1.51- 2.00	10	12	6	1	0	1	0	4	20	10	2	0	1	1	12	13	93
2.01- 3.00	7	13	2	0	0	0	2	7	9	1	1	0	1	2	7	13	65
3.01- 5.00	1	0	0	0	0	0	0	2	2	0	0	0	1	1	1	4	12
5.01- 7.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.01-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.01-15.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	32	32	15	5	2	17	32	91	64	64	47	22	15	22	62	56	517

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
 WIND MEASURED AT: 33.0 FEET
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM	0	0	0	0	0	0	0	1	3	3	1	0	0	0	0	0	2
0.34- 0.50	0	0	0	0	0	0	0	1	3	7	1	0	1	1	3	0	6
0.51- 0.75	0	0	0	0	0	0	0	2	2	1	2	2	1	2	2	0	17
0.76- 1.00	0	0	0	0	0	0	1	3	1	0	3	1	1	0	1	1	14
1.01- 1.50	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	2	4
1.51- 2.00	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	2
2.01- 3.00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
3.01- 5.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.01- 7.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.01-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.01-15.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	1	0	0	0	1	9	11	12	7	3	1	1	6	5	61

Second Quarter
Continuous Releases
Joint Frequency Distributions

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/SL	N	MNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	MSW	W	WNW	NW	MNW	IOIAL
0.34- 0.50	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
0.51- 0.75	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	6
0.76- 1.00	0	0	0	0	1	0	0	2	1	1	0	1	0	0	0	0	6
1.01- 1.50	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	3
1.51- 2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.01- 3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.01- 5.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.01- 7.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.01-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	1	0	5	2	4	0	1	0	0	0	4	17

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/SL	N	MNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	MSW	W	WNW	NW	MNW	IOIAL
0.34- 0.50	0	0	0	0	1	0	0	1	12	12	3	3	2	1	1	2	38
0.51- 0.75	4	3	6	0	2	2	7	9	19	24	20	10	6	7	10	8	141
0.76- 1.00	12	6	1	4	3	6	7	11	22	11	14	11	6	10	14	16	154
1.01- 1.50	30	22	4	6	6	6	22	25	34	20	14	7	7	12	32	31	279
1.51- 2.00	45	27	6	2	2	2	26	13	25	14	6	2	2	3	27	31	233
2.01- 3.00	71	78	14	3	0	5	43	32	55	14	5	2	3	5	36	46	416
3.01- 5.00	164	64	13	0	0	1	45	120	39	7	2	2	3	18	37	137	652
5.01- 7.00	67	3	1	0	0	0	10	34	4	0	0	0	2	9	12	60	206
7.01-10.00	6	0	0	0	0	0	0	3	0	0	0	0	0	0	0	6	15
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.00	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
TOTAL	399	203	49	15	14	22	160	252	210	110	64	34	31	65	169	337	2138

TABLE C-10

TROJAN

Second Quarter 1980 Continuous Release Average X/Q Values (sec/m³)

Receptor Direction	Downwind Distance From Release (miles)										
	0.5	1.5	2.5	3.5	4.5	7.5	15.0	25.0	35.0	45.0	55.0
N	6.4-6	1.4-6	6.6-7	4.1-7	2.9-7	1.4-7	5.4-8	2.7-8	1.7-8	1.2-8	9.2-9
NNE	6.0-6	1.2-6	5.6-7	3.5-7	2.5-7	1.3-7	5.0-8	2.5-8	1.6-8	1.2-8	9.0-9
NE	3.9-6	8.4-7	3.2-7	2.0-7	1.4-7	6.9-8	2.6-8	1.3-8	8.4-9	6.0-9	4.6-9
ENE	3.0-6	5.6-7	2.2-7	1.1-7	7.9-8	3.9-8	1.5-8	7.6-9	4.8-9	3.5-9	2.7-9
E	2.3-6	5.0-7	2.1-7	9.8-8	5.3-8	2.6-8	1.0-8	5.0-9	3.1-9	2.2-9	1.7-9
ESE	3.2-6	6.8-7	2.8-7	1.4-7	6.9-8	3.3-8	1.2-8	6.0-9	3.7-9	2.6-9	2.0-9
SE	4.8-6	1.1-6	4.8-7	2.5-7	1.6-7	7.5-8	2.8-8	1.4-8	8.6-9	6.1-9	4.6-9
SSE	4.4-6	8.5-7	4.0-7	2.5-7	1.7-7	8.5-8	3.2-8	1.6-8	1.0-8	7.4-9	5.7-9
S	3.5-6	6.6-7	3.0-7	1.8-7	1.3-7	5.9-8	2.1-8	1.0-8	6.4-9	4.5-9	3.4-9
SSW	2.5-6	4.8-7	2.2-7	1.3-7	9.0-8	4.2-8	1.5-8	7.2-9	4.4-9	3.1-9	2.3-9
SW	1.0-6	8-7	7.1-8	4.7-8	2.9-8	1.4-8	5.1-9	2.5-9	1.6-9	1.1-9	8.7-10
WSW	4.8-7	7.6-8	2.5-8	1.5-8	1.0-8	4.7-9	1.6-9	7.8-10	4.8-10	3.3-10	2.5-10
W	8.8-7	1.3-7	4.1-8	2.5-8	1.7-8	8.2-9	3.0-9	1.5-9	9.2-10	6.5-10	4.9-10
WNW	1.1-6	1.6-7	5.4-8	3.3-8	2.1-8	1.0-8	3.3-9	1.9-9	1.2-9	8.5-10	6.5-10
NW	2.5-6	4.8-7	1.8-7	1.1-7	6.7-8	3.2-8	1.2-8	5.9-9	3.7-9	2.7-9	2.0-9
NNW	4.0-6	7.7-7	3.3-7	2.1-7	1.5-7	7.2-8	2.8-8	1.4-8	8.9-9	6.4-9	4.9-9

Note: 6.4-6 = 6.4x10⁻⁶

TABLE C-11

TROJAN

Second Quarter 1980 Continuous Release Average D/Q Values ($1/m^2$)

Receptor Direction	Downwind Distance From Release (miles)										
	0.5	1.5	2.5	3.5	4.5	7.5	15.0	25.0	35.0	45.0	55.0
N	1.9-8	3.0-9	1.2-9	6.9-10	4.4-10	1.8-10	5.6-11	2.3-11	1.2-11	7.6-12	5.2-12
NNE	1.1-8	1.8-9	6.6-10	3.6-10	2.3-10	9.4-11	3.0-11	1.2-11	6.5-12	4.0-12	2.7-12
NE	7.7-9	1.2-9	3.8-10	2.1-10	1.3-10	5.4-11	1.7-11	7.0-12	3.7-12	2.3-12	1.6-12
ENE	5.6-9	8.9-10	2.4-10	1.1-10	7.1-11	2.9-11	9.1-12	3.7-12	2.0-12	1.2-12	8.4-13
E	5.7-9	9.0-10	3.1-10	1.3-10	6.5-11	2.6-11	8.3-12	3.4-12	1.8-12	1.1-12	7.6-13
ESE	1.2-8	1.9-9	6.5-10	3.0-10	1.3-10	5.5-11	1.7-11	7.1-12	3.8-12	2.4-12	1.6-12
SE	2.0-8	3.4-9	1.3-9	6.0-10	3.5-10	1.4-10	4.5-11	1.8-11	9.8-12	6.1-12	4.1-12
SSE	3.1-8	4.8-9	2.0-9	1.1-9	7.0-10	2.8-10	9.0-11	3.6-11	2.0-11	1.2-11	8.3-12
S	3.7-8	5.7-9	2.4-9	1.3-9	8.3-10	3.4-10	1.1-10	4.3-11	2.3-11	1.4-11	9.8-12
SSW	1.9-8	2.9-9	1.2-9	6.6-10	4.2-10	1.7-10	5.4-11	2.2-11	1.2-11	7.3-12	5.0-12
SW	5.8-9	8.5-10	2.9-10	1.8-10	1.0-10	4.1-11	1.3-11	5.3-12	2.9-12	1.8-12	1.2-12
WSW	2.3-9	3.0-10	8.9-11	4.9-11	3.1-11	1.3-11	4.0-12	1.6-12	8.7-13	5.4-13	3.7-13
W	2.6-9	3.0-10	8.3-11	4.6-11	2.9-11	1.2-11	3.7-12	1.5-12	8.1-13	5.1-13	3.4-13
WNW	3.8-9	4.7-10	1.4-10	7.9-11	4.6-11	1.8-11	5.9-12	2.4-12	1.3-12	8.0-13	5.4-13
NW	2.1-8	3.2-9	1.0-9	5.7-10	3.3-10	1.3-10	4.3-11	1.7-11	9.3-12	5.8-12	3.9-12
NNW	2.5-8	4.0-9	1.5-9	8.2-10	5.2-10	2.1-10	6.7-11	2.7-11	1.5-11	9.1-12	6.2-12

Note: 1.9-8 = 1.9×10^{-8}

TABLE C-12

TROJAN

Second Quarter 1980 Continuous Release Average X/Q Values (sec/m^3)
Deposition (m^{-2}) and Plume Depletion Factor at Offsite Exposure Locations

Sector Direction	Wind Direction		Site Boundary	Nearest Cows	Nearest Goats	Nearest Cattle	Nearest Sheep	Nearest Vegetable Garden	Nearest Residence
N	S	X/Q	8.5-6	2.5-7	3.4-7	3.4-7	2.5-7	3.4-7	8.2-6
		D/Q	2.6-8	3.6-10	5.4-10	5.4-10	3.6-10	5.4-10	2.5-8
		PDF	0.92	0.75	0.77	0.77	0.75	0.77	0.92
NNE	SSW	X/Q	7.9-6	2.2-7	5.6-7	6.3-7	2.2-7	6.7-7	1.1-6
		D/Q	1.5-8	1.9-10	6.6-10	7.6-10	1.9-10	7.6-10	1.5-9
		PDF	0.92	0.75	0.81	0.82	0.75	0.82	0.84
NE	SW	X/Q	3.8-6	1.2-7	5.6-7	6.5-7	1.2-7	6.5-7	7.0-7
		D/Q	7.4-9	1.1-10	7.3-10	8.8-10	1.1-10	8.8-10	9.7-10
		PDF	0.91	0.75	0.83	0.84	0.75	0.84	0.84
ENE	WSW	X/Q	3.9-6	8.4-8	6.9-8	1.7-7	6.9-8	2.2-7	2.7-7
		D/Q	7.3-9	7.7-11	5.9-11	1.8-10	5.9-11	2.4-10	3.2-10
		PDF	0.92	0.76	0.75	0.79	0.75	0.81	0.82
E	W	X/Q	3.1-6	4.6-8	4.6-8	4.2-7	2.3-7	5.0-7	1.8-6
		D/Q	7.5-9	5.3-11	5.3-11	7.2-10	3.6-10	9.0-10	4.3-9
		PDF	0.92	0.75	0.75	0.84	0.82	0.85	0.90
ESE	WNW	X/Q	3.2-6	6.0-8	6.0-8	2.1-7	6.0-8	2.1-7	2.6-6
		D/Q	1.2-8	1.1-10	1.1-10	4.7-10	1.1-10	4.7-10	9.2-9
		PDF	0.91	0.75	0.75	0.79	0.75	0.79	0.90
SE	NW	X/Q	3.5-6	1.3-7	2.0-7	1.5-7	1.5-7	1.6-7	5.1-7
		D/Q	1.4-8	2.9-10	4.8-10	3.2-10	3.2-10	3.5-10	1.4-9
		PDF	0.90	0.75	0.77	0.75	0.75	0.76	0.81
SSE	NNW	X/Q	1.5-6	1.5-7	1.5-7	1.5-7	1.5-7	1.5-7	1.1-6
		D/Q	9.3-9	5.8-10	5.8-10	5.8-10	5.8-10	5.8-10	6.3-9
		PDF	0.87	0.74	0.74	0.74	0.74	0.75	0.86
S	N	X/Q	1.6-6	1.1-7	4.3-7	1.5-7	1.1-7	8.2-7	1.1-6
		D/Q	1.6-8	6.8-10	3.5-9	1.0-9	6.8-10	7.3-9	9.8-9
		PDF	0.89	0.75	0.83	0.77	0.75	0.86	0.87
SSW	NNE	X/Q	1.3-6	4.0-7	1.7-7	4.0-7	7.7-8	4.3-7	7.4-7
		D/Q	9.1-9	2.4-9	8.7-10	2.4-9	3.5-10	2.9-9	4.8-9
		PDF	0.89	0.84	0.79	0.84	0.75	0.84	0.87
SW	NE	X/Q	5.0-7	2.5-8	3.9-8	1.8-7	1.8-7	1.8-7	3.7-7
		D/Q	2.6-9	8.4-11	1.4-10	8.5-10	8.5-10	8.5-10	1.8-9
		PDF	0.89	0.75	0.77	0.85	0.85	0.85	0.88
WSW	ENE	X/Q	2.1-7	8.6-9	8.6-9	2.4-7	1.5-8	2.4-7	7.1-8
		D/Q	9.4-10	2.6-11	2.6-11	1.1-9	4.9-11	1.1-9	2.8-10
		PDF	0.88	0.75	0.75	0.99	0.78	0.89	0.85
W	E	X/Q	6.9-7	1.5-8	3.1-8	5.0-8	1.5-8	1.2-7	2.0-7
		D/Q	2.0-9	2.4-11	6.0-11	1.0-10	2.4-11	2.7-10	5.0-10
		PDF	0.90	0.75	0.79	0.82	0.75	0.85	0.87
WNW	ESE	X/Q	7.4-7	1.8-8	2.3-8	1.4-7	1.8-8	1.4-7	1.3-7
		D/Q	2.6-9	3.8-11	5.2-11	4.2-10	3.8-11	4.2-10	3.8-10
		PDF	0.90	0.75	0.76	0.84	0.75	0.84	0.84
NW	SE	X/Q	2.5-6	5.7-8	5.7-8	6.7-8	5.7-8	8.8-7	2.4-7
		D/Q	2.0-8	2.7-10	2.7-10	3.3-10	2.7-10	6.5-9	1.5-9
		PDF	0.91	0.75	0.75	0.76	0.75	0.88	0.83
NNW	SSE	X/Q	5.3-6	1.3-7	5.1-7	7.7-7	1.3-7	3.0-6	4.3-6
		D/Q	3.4-8	4.3-10	2.4-9	4.0-9	4.3-10	1.9-8	2.7-8
		PDF	0.92	0.75	0.83	0.85	0.75	0.90	0.92

Note: 8.5-6 = 8.5×10^{-6}

First Quarter
Batch Releases
Joint Frequency Distributions

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/SL	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.34- 0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51- 0.75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.76- 1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.01- 1.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.51- 2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.01- 3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.01- 5.00	4	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
5.01- 7.00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
7.01-10.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
213.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4	2	0	0	0	0	0	3	1	0	0	0	0	0	0	0	13

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/SL	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.34- 0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51- 0.75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.76- 1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.01- 1.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.51- 2.00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2.01- 3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.01- 5.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.01- 7.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.01-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
213.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

TABLE C-13

First Quarter
Batch Releases
Joint Frequency Distributions

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET

WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED (M/3)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	MSW	W	MNW	NW	MNW	TOTAL
0.34- 0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51- 0.75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.76- 1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.01- 1.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.51- 2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.01- 3.00	1	0	0	0	0	2	2	2	0	0	0	0	0	0	0	0	5
3.01- 5.00	0	1	0	0	0	1	2	0	0	0	0	0	0	0	0	0	4
5.01- 7.00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7.01-10.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	2	0	0	0	0	3	4	1	0	0	0	0	0	0	0	11

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET

WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED (M/3)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	MSW	W	MNW	NW	MNW	TOTAL
0.34- 0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51- 0.75	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	1	4
0.76- 1.00	3	0	0	0	2	1	1	3	5	1	2	1	1	1	1	0	21
1.01- 1.50	5	1	0	1	0	0	5	2	0	1	0	0	0	0	2	4	23
1.51- 2.00	1	1	0	0	0	0	3	3	1	1	0	0	0	0	0	1	11
2.01- 3.00	3	1	0	0	0	0	1	8	4	1	0	0	1	1	2	2	23
3.01- 5.00	4	0	0	0	0	0	2	22	25	1	0	0	0	0	2	2	58
5.01- 7.00	4	1	0	0	0	0	0	8	10	0	0	0	0	0	0	0	23
7.01-10.00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	20	4	1	1	2	1	12	46	46	5	2	1	2	2	9	12	166

TABLE C-13

First Quarter
Batch Releases
Joint Frequency Distributions

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/S	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.34- 0.50	0	0	0	0	0	0	0	0	3	1	2	0	0	0	1	0	0
0.51- 0.75	1	1	0	1	0	0	0	1	1	2	2	1	0	1	1	0	7
0.76- 1.00	1	1	0	0	0	0	1	3	0	1	2	0	0	1	1	0	12
1.01- 1.50	0	0	0	0	0	0	4	7	6	3	1	1	0	1	2	0	22
1.51- 2.00	0	1	0	0	0	0	2	3	3	1	0	0	0	1	2	4	30
2.01- 3.00	2	1	0	0	0	0	1	9	6	3	2	0	0	0	1	1	13
3.01- 5.00	1	0	0	0	0	0	5	9	3	1	0	0	0	0	0	1	25
5.01- 7.00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
7.01-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
213.00	5	5	0	1	0	0	13	33	30	15	10	2	3	3	7	6	133
TOTAL	5	5	0	1	0	0	13	33	30	15	10	2	3	3	7	6	133

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/S	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.34- 0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51- 0.75	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
0.76- 1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1.01- 1.50	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1
1.51- 2.00	0	0	0	0	0	0	1	2	1	0	0	1	0	0	0	1	2
2.01- 3.00	0	0	0	0	0	0	2	4	4	0	0	1	0	0	0	0	5
3.01- 5.00	0	0	0	0	0	0	1	1	1	0	0	0	0	0	1	0	11
5.01- 7.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.01-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
243.00	0	0	0	0	0	0	4	9	6	2	0	1	0	1	1	0	25
TOTAL	0	0	0	0	0	0	4	9	6	2	0	1	0	1	1	0	25

First Quarter
Batch Releases
Joint Frequency Distributions

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	MNW	IOIAL
0.34-0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51-0.75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.76-1.00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
1.01-1.50	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
1.51-2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.01-3.00	0	0	0	0	0	0	2	4	1	0	0	0	0	0	0	0	7
3.01-5.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.01-7.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.01-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.01-15.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	2	6	1	0	0	0	0	0	0	0	9

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED (M/S)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	MNW	IOIAL
0.34-0.50	0	0	0	0	1	0	0	0	3	1	2	0	0	0	2	0	9
0.51-0.75	1	1	1	1	0	0	0	1	1	3	2	1	0	1	3	1	17
0.76-1.00	4	1	0	1	1	2	7	13	13	2	4	1	3	3	3	1	46
1.01-1.50	5	2	0	1	0	0	9	11	6	4	1	1	0	1	4	11	56
1.51-2.00	2	2	0	0	0	0	6	8	5	2	0	1	1	0	1	2	30
2.01-3.00	6	2	0	0	0	0	8	29	15	4	2	0	1	1	2	3	73
3.01-5.00	9	3	0	0	0	0	10	39	29	5	1	0	0	0	2	4	102
5.01-7.00	4	2	0	0	0	0	10	10	10	1	0	0	0	0	0	0	27
7.01-10.00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	6	0	3
10.01-15.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	31	13	1	2	2	1	35	105	85	22	12	4	5	6	17	22	363

TABLE C-14

TTOJAN

Second Quarter 1980 Batch Releases Average X/Q Values (sec/m³)

Receptor Direction	Downwind Distance From Release (miles)										
	0.5	1.5	2.5	3.5	4.5	7.5	15.0	25.0	35.0	45.0	55.0
N	7.6-6	1.6-6	7.7-7	4.8-7	3.4-7	1.7-7	6.4-8	3.2-8	2.0-8	1.4-8	1.1-8
NNE	6.2-6	1.3-6	5.8-7	3.7-7	2.6-7	1.3-7	5.0-8	2.5-8	1.6-8	1.2-8	8.9-9
NE	4.2-6	9.2-7	3.5-7	2.2-7	1.5-7	7.6-8	2.9-8	1.5-8	9.3-9	6.6-9	5.1-9
ENE	3.1-6	7.0-7	2.3-7	1.2-7	8.2-8	4.0-8	1.5-8	7.6-9	4.8-9	3.6-9	2.6-9
E	3.0-6	6.4-7	2.7-7	1.3-7	6.8-8	3.2-8	1.3-8	6.3-9	4.0-9	2.8-9	2.2-9
ESE	3.5-6	7.5-7	3.0-7	1.5-7	7.7-8	3.7-8	1.4-8	6.7-9	4.2-9	2.9-9	2.2-9
SE	4.5-6	1.0-6	4.5-7	2.4-7	1.5-7	7.2-8	2.7-8	1.3-8	8.1-9	5.7-9	4.3-9
SSE	3.9-6	7.8-7	3.7-7	2.2-7	1.5-7	7.4-8	2.7-8	1.3-8	8.4-9	6.0-9	4.5-9
S	3.5-6	6.7-7	3.1-7	1.8-7	1.3-7	5.9-8	2.1-8	1.0-8	6.4-9	4.5-9	3.4-9
SSW	2.4-6	4.7-7	2.2-7	1.3-7	8.9-8	4.2-8	1.5-8	7.2-9	4.5-9	3.1-9	2.4-9
SW	1.2-6	2.7-7	8.9-8	5.9-8	3.7-8	1.8-8	6.6-9	3.2-9	2.0-9	1.4-9	1.1-9
WSW	2.1-7	2.8-7	2.1-8	6.5-9	4.5-9	2.1-9	7.6-10	3.6-10	2.3-10	1.6-10	1.2-10
W	1.2-6	1.8-7	3.7-8	3.4-8	2.4-8	1.1-8	4.1-9	2.0-9	1.3-9	8.9-10	6.7-10
WNW	1.3-6	1.9-7	6.6-8	4.0-8	2.6-8	1.2-8	4.7-9	2.4-9	1.5-9	1.1-9	8.2-10
NW	2.9-6	5.7-7	2.1-7	1.3-7	7.9-8	3.8-8	1.4-8	7.0-9	4.4-9	3.2-9	2.4-9
NNW	3.2-6	6.3-7	2.7-7	1.7-7	1.2-7	5.6-8	2.1-8	1.0-8	6.6-9	4.7-9	3.6-9

Note: 7.6-6 = 7.6×10^{-6}

TABLE C-15

TROJAN

Second Quarter 1980 Batch Releases Average D/Q Values ($1/m^2$)

Receptor Direction	Downwind Distance From Release (miles)										
	0.5	1.5	2.5	3.5	4.5	7.5	15.0	25.0	35.0	45.0	55.0
N	2.0-8	3.2-9	1.3-9	7.2-10	4.6-10	1.9-10	5.9-11	2.4-11	1.3-11	8.0-12	5.4-12
NNE	1.2-8	1.8-9	6.9-10	3.8-10	2.4-10	9.8-11	3.1-11	1.3-11	6.8-12	4.2-12	2.9-12
NE	8.2-9	1.3-9	4.0-10	2.2-10	1.4-10	5.8-11	1.8-11	7.4-12	4.0-12	2.5-12	1.7-12
ENE	5.5-9	8.7-10	2.4-10	1.1-10	7.0-11	2.8-11	9.0-12	3.6-12	2.0-12	1.2-12	8.2-13
E	7.2-9	1.1-9	3.9-10	1.7-10	8.1-11	3.3-11	1.0-11	4.2-12	2.3-12	1.4-12	9.6-13
ESE	1.3-8	2.0-9	7.1-10	3.2-10	1.5-10	6.0-11	1.9-11	7.7-12	4.1-12	2.6-12	1.7-12
SE	1.9-8	3.3-9	1.3-9	5.9-10	3.4-10	1.4-10	4.4-11	1.8-11	9.5-12	5.9-12	4.0-12
SSE	2.8-8	4.3-9	1.8-9	9.8-10	6.3-10	2.5-10	8.1-11	3.3-11	1.8-11	1.1-11	7.4-12
S	3.8-8	5.9-9	2.4-9	1.3-9	8.5-10	3.4-10	1.1-10	4.4-11	2.4-11	1.5-11	1.0-11
SSW	1.8-8	2.8-9	1.1-9	6.2-10	4.0-10	1.6-10	5.1-11	2.1-11	1.1-11	6.9-12	4.7-12
SW	6.9-9	1.0-9	3.4-10	2.1-10	1.2-10	4.9-11	1.6-11	6.3-12	3.4-12	2.1-12	1.4-12
WSW	1.5-9	2.0-10	5.7-11	3.2-11	2.0-11	8.2-12	2.6-12	1.1-12	5.6-13	3.5-13	2.4-13
W	3.3-9	3.9-10	1.1-10	5.9-11	3.7-11	1.5-11	4.8-12	1.9-12	1.0-12	6.5-13	4.4-13
WNW	4.6-9	5.7-10	1.7-10	9.4-11	5.5-11	2.2-11	7.0-12	2.8-12	1.5-12	9.5-13	6.5-13
NW	2.2-8	3.4-9	1.1-9	6.1-10	3.5-10	1.4-10	4.5-11	1.8-11	9.9-12	6.2-12	4.2-12
NNW	2.4-8	3.8-9	1.4-9	7.8-10	4.9-10	2.0-10	6.4-11	2.6-11	1.4-11	8.6-12	5.8-12

Note: $2.0-8 = 2.0 \times 10^{-8}$

TABLE C-16

TROJAN

Second Quarter 1980 Batch Releases Average X/Q Values (sec/m^3)
 Deposition (m^{-2}) and Plume Depletion Factor at Offsite Exposure Locations

Sector Direction	Wind Direction	Wind (a)	Site Boundary	Nearest Cows	Nearest Goats	Nearest Cattle	Nearest Sheep	Nearest Vegetable Garden	Nearest Residence
N	S	X/Q	1.0-5	2.9-7	4.0-7	4.0-7	2.9-7	4.0-7	9.6-6
		D/Q	2.8-8	3.8-10	5.7-10	5.7-10	3.8-10	5.7-10	2.6-8
		PDF	0.92	0.75	0.77	0.77	0.75	0.77	0.92
NNE	SSW	X/Q	8.1-6	2.2-7	5.8-7	6.6-7	2.2-7	6.6-7	1.1-6
		D/Q	1.5-8	2.0-10	6.9-10	8.0-10	2.0-10	8.0-10	1.5-9
		PDF	0.92	0.75	0.81	0.82	0.75	0.82	0.84
NE	SW	X/Q	4.1-6	1.3-7	6.2-7	7.1-7	1.3-7	7.1-7	7.7-7
		D/Q	7.9-9	1.2-10	7.8-10	9.3-10	1.2-10	9.3-10	1.0-9
		PDF	0.91	0.75	0.83	0.84	0.75	0.84	0.84
ENE	WSW	X/Q	4.0-6	8.7-8	7.1-8	1.7-7	7.1-8	2.3-7	2.8-7
		D/Q	7.1-9	7.6-11	5.8-11	1.7-10	5.8-11	2.4-10	3.1-10
		PDF	0.92	0.76	0.75	0.79	0.75	0.81	0.82
E	W	X/Q	3.9-6	5.9-8	5.9-8	5.4-7	3.0-7	6.4-7	2.3-6
		D/Q	9.4-9	6.7-11	6.7-11	9.1-10	4.5-10	1.1-9	5.4-9
		PDF	0.92	0.75	0.75	0.84	0.82	0.85	0.90
ESE	WNW	X/Q	3.5-6	6.6-8	6.6-8	2.3-7	6.6-8	2.3-7	2.8-6
		D/Q	1.3-8	1.2-10	1.2-10	5.1-10	1.2-10	5.1-10	1.0-8
		PDF	0.91	0.75	0.75	0.79	0.75	0.79	0.90
SE	NW	X/Q	3.3-6	1.3-7	1.9-7	1.4-7	1.4-7	1.5-7	4.9-7
		D/Q	1.4-8	2.8-10	4.6-10	3.1-10	3.1-10	3.4-10	1.4-9
		PDF	0.90	0.75	0.77	0.75	0.75	0.76	0.81
SSE	NNW	X/Q	1.4-6	1.3-7	1.3-7	1.3-7	1.3-7	1.3-7	9.7-7
		D/Q	8.4-9	5.2-10	5.2-10	5.2-10	5.2-10	5.2-10	5.6-9
		PDF	0.87	0.75	0.75	0.75	0.75	0.75	0.86
S	N	X/Q	1.6-6	1.1-7	4.3-7	1.5-7	1.1-7	8.3-7	1.1-6
		D/Q	1.6-8	7.0-10	3.6-9	1.1-9	7.0-10	7.6-9	1.0-8
		PDF	0.89	0.75	0.83	0.77	0.75	0.86	0.87
SSW	NNE	X/Q	1.3-6	3.9-7	1.6-7	3.9-7	7.6-8	4.3-7	7.3-7
		D/Q	8.6-9	2.2-9	8.2-10	2.2-9	3.3-10	2.5-9	4.5-9
		PDF	0.89	0.84	0.79	0.84	0.75	0.84	0.87
SW	NE	X/Q	6.0-7	3.2-8	4.9-9	2.3-7	2.3-7	2.3-7	4.5-7
		D/Q	3.1-9	1.0-10	1.6-10	1.0-9	1.0-9	1.0-9	2.2-9
		PDF	0.89	0.75	0.77	0.85	0.85	0.85	0.88
WSW	ENE	X/Q	8.9-8	3.8-9	3.8-9	1.0-7	6.5-9	1.0-7	3.0-8
		D/Q	6.1-10	1.7-11	1.7-11	7.0-10	3.2-11	7.0-10	1.8-10
		PDF	0.88	0.75	0.75	0.89	0.78	0.89	0.85
W	E	X/Q	1.0-6	2.0-8	4.3-8	6.9-8	2.0-8	1.7-7	2.8-7
		D/Q	2.5-9	3.1-11	7.7-11	1.3-10	3.1-11	3.5-10	6.4-10
		PDF	0.90	0.75	0.79	0.82	0.75	0.84	0.87
WNW	ESE	X/Q	9.0-7	2.2-8	2.8-8	1.7-7	2.2-8	1.7-7	1.6-7
		D/Q	3.1-9	4.5-11	6.2-11	5.1-10	4.5-11	5.1-10	4.5-10
		PDF	0.90	0.75	0.76	0.84	0.75	0.84	0.84
NW	SE	X/Q	2.9-6	6.8-8	6.8-8	7.9-8	6.8-8	1.0-6	2.8-7
		D/Q	2.1-8	2.9-10	2.9-10	3.5-10	2.9-10	6.9-9	1.6-9
		PDF	0.91	0.75	0.75	0.76	0.75	0.88	0.83
NNW	SSE	X/Q	4.3-6	9.9-8	4.1-7	6.3-7	9.9-8	2.5-6	3.5-6
		D/Q	3.2-8	4.1-10	2.3-9	3.8-9	4.1-10	1.8-8	2.6-8
		PDF	0.92	0.75	0.83	0.85	0.75	0.90	0.92

Note: $1.0-5 = 1.0 \times 10^{-5}$

Second Quarter
Batch Releases
Joint Frequency Distributions

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/SEC	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	INITIAL
0.34-0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51-0.75	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
0.76-1.00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
1.01-1.50	2	2	0	2	0	0	0	2	0	0	0	0	0	0	2	3	13
1.51-2.00	7	1	1	0	0	1	10	3	0	0	0	0	1	0	0	0	25
2.01-3.00	8	10	2	2	0	3	22	1	0	0	0	0	0	0	0	0	53
3.01-5.00	54	13	7	0	0	0	16	25	0	0	0	0	1	0	1	21	138
5.01-7.00	28	1	1	0	0	0	5	3	0	0	0	0	0	0	0	11	49
7.01-10.00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
10.01-15.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	100	27	11	4	0	4	54	54	0	1	0	0	2	0	3	41	281

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/SEC	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	INITIAL
0.34-0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51-0.75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.76-1.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.01-1.50	2	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
1.51-2.00	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	4
2.01-3.00	3	3	0	0	0	0	4	1	1	0	0	0	0	0	1	1	14
3.01-5.00	13	0	2	0	0	1	2	17	0	0	0	0	0	0	0	6	42
5.01-7.00	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	10
7.01-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.01-15.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	28	6	2	0	0	3	7	18	1	0	0	0	0	0	2	8	78

TABLE C-17
 Second Quarter
 Latch Releases
 Joint Frequency Distributions

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
 WIND MEASURED AT: 33.0 FEET
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/SL	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	INITIAL
0.34- 0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.51- 0.75	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0.76- 1.00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
1.01- 1.50	3	1	0	0	1	0	6	1	0	0	0	0	1	0	0	0	1
1.51- 2.00	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	14
2.01- 3.00	4	3	0	0	0	0	7	1	0	0	0	0	0	0	0	0	17
3.01- 5.00	11	1	0	0	0	0	10	0	0	0	0	0	0	0	0	0	10
5.01- 7.00	5	1	0	0	0	0	0	12	0	0	0	0	0	0	1	9	32
7.01-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
TOTAL	25	9	3	0	1	0	15	16	0	0	0	0	1	0	1	19	98

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
 WIND MEASURED AT: 33.0 FEET
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED M/SL	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	INITIAL
0.34- 0.50	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0.51- 0.75	0	2	0	0	1	2	2	4	4	3	1	0	0	0	1	1	2
0.76- 1.00	7	3	0	1	1	3	3	1	6	3	1	1	2	6	7	6	24
1.01- 1.50	12	8	3	1	1	3	5	6	8	5	1	1	3	5	11	10	51
1.51- 2.00	21	13	1	1	0	0	10	2	11	2	1	1	5	5	4	9	83
2.01- 3.00	27	25	3	0	0	1	5	16	23	4	1	1	2	1	11	18	76
3.01- 5.00	41	18	2	0	0	0	5	33	20	4	1	2	1	15	20	38	136
5.01- 7.00	8	0	0	0	0	0	4	14	0	0	0	0	1	5	10	18	200
7.01-10.00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	60
10.01-13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
TOTAL	121	69	11	3	4	9	32	76	72	21	6	6	9	32	64	106	641

TABLE C-17

Second Quarter
Batch Releases
Joint Frequency Distributions

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED (M/S)	N	MNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM	0	0	0	0	0	0	0	0	0	6	1	3	2	1	1	0	22
0.34-0.50	1	0	0	0	1	0	3	2	11	12	15	9	5	4	5	2	78
0.51-0.75	1	0	1	0	2	1	3	2	9	5	10	4	3	2	2	4	49
0.76-1.00	4	3	4	1	1	0	6	6	16	10	5	1	1	5	11	7	80
1.01-1.50	4	3	2	0	1	0	2	4	9	8	4	0	1	2	13	4	57
1.51-2.00	6	12	6	0	0	1	0	2	17	8	2	0	1	1	6	11	73
2.01-3.00	6	9	1	0	0	0	0	5	7	1	1	0	1	2	7	11	51
3.01-5.00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	4
5.01-7.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.01-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.01-15.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>15.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	22	27	14	0	5	2	14	22	77	50	38	17	14	18	46	48	408

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
WIND MEASURED AT: 33.0 FEET
WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED (M/S)	N	MNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	2
0.34-0.50	0	0	0	0	0	0	0	0	3	7	7	0	1	1	2	0	14
0.51-0.75	0	0	0	0	0	0	0	2	0	0	1	1	0	0	0	1	5
0.76-1.00	0	0	0	0	0	0	1	3	0	0	3	0	1	0	0	0	8
1.01-1.50	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	3
1.51-2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2.01-3.00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3.01-5.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.01-7.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.01-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.01-15.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>15.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	1	0	0	0	1	5	6	10	5	1	2	1	2	3	39

TABLE C-17
 Second Quarter
 Batch Releases
 Joint Frequency Distributions

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
 WIND MEASURED AT: 33.0 FEET
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED (M/5)	W	MNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	MNW	NW	MNW	MMW	MMW	MMW	MMW	TOTAL		
0.34- 0.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0.51- 0.75	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
0.76- 1.00	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.01- 1.50	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.51- 2.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.01- 3.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.01- 5.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.01- 7.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.01- 10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.01- 13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	1	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 200.0 AND 33.0 FEET
 WIND MEASURED AT: 33.0 FEET
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 33.00 FEET

SPEED (M/5)	W	MNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	MNW	NW	MNW	MMW	MMW	MMW	MMW	TOTAL
0.34- 0.50	0	0	0	0	1	0	0	0	11	0	2	3	2	1	1	1	1	1	1	1	30
0.51- 0.75	1	3	4	0	2	2	6	6	18	24	16	9	6	5	8	6	5	8	6	6	116
0.76- 1.00	0	3	1	1	3	5	7	7	16	8	12	6	5	8	9	11	10	8	9	11	110
1.01- 1.50	23	15	7	3	6	5	10	10	25	15	9	2	6	10	24	21	10	10	24	21	207
1.51- 2.00	35	21	5	1	1	1	24	9	29	11	5	1	2	2	17	17	2	2	17	17	172
2.01- 3.00	48	53	12	2	0	5	56	21	41	12	3	1	3	2	16	16	2	2	16	36	295
3.01- 5.00	125	41	12	0	0	1	23	90	27	5	2	2	3	17	30	85	17	30	85	463	
5.01- 7.00	50	2	1	0	0	0	9	20	0	0	0	0	1	6	11	34	6	11	34	134	
7.01- 10.00	6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5	0	0	0	5	12
10.01- 13.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	296	138	42	7	13	19	123	172	158	83	49	24	28	51	110	210	51	110	210	210	1543