2116-M

Monsanto

FROM (NAME & LOCATION) M. T. White, Jr. - B-2-N

DATE April 5, 1967

SUBJECT LIQUID AROCLOR DISTRIBUTION

REFERENCE

TO : R. S. Yates
RYATE

J. J. Kagan
H. J. Day
H. J. Day
N. L. Sample
H. C. Carder
C. M. Williams-CWILL
[redacted]
R. G. Moody-Anniston

CC HARRY RAY D.T. MAYER
VINE BRANDEN D.C. ARMSTRONG
JACK MULLOY

A study of the distribution of liquid Aroclors has been completed. The freight costs for shipping Biphenyl from Anniston were included in the study along with the distribution costs for the Aroclors; no allowance was made for any difference in chlorine costs or any difference in the cost of manufacture at the producing plants. The freight savings possible if Aroclors were manufactured at the Delaware River plant were also estimated.

CONCLUSIONS

The rate of increase of Aroclor production will definitely be faster at WGK than at Anniston, due primarily to the estimated increase between 1967 and 1971 of 5.5 M lbs. of Aroclors used in Pydraul blends at the Queeny Plant. Production at Anniston should increase from 42.9 M lbs. in 1967 to 50.0 M lbs. in 1971 while WGK should increase from 27.3 M lbs. in 1967 to 38.1 M lbs. in 1971.

FACIL- WE MIGHT WANT TO LOOK AT BIPHENYL IMPROVE PPM

Economics of manufacturing at the Delaware River plant were not as favorable as had been expected due to two factors: 1) Biphenyl is shipped in a higher freight classification than Aroclors and, consequently, the freight costs are higher, and 2) shipping Aroclors from Delaware River relatively short distances results in higher freight costs per mile, and, therefore, reduces the savings available. Based on a production of 15.2 M lbs. of Aroclors at Delaware River, savings of only $16,700/year in freight costs would be possible.

DETAILS

A study of the distribution of liquid Aroclors for the next five years has been made using the "Sales Forecast Production Report" of November 8, 1966 as a basis. The Delaware River plant was included as a manufacturing site to determine what freight savings would be possible. The distribution of each Aroclor was "broken down" by end use (such as Electrical Grade, Plasticizers, etc.) and then by customer and location (Appendix D attached). Sales to low volume customers were tabulated by districts. For each location, the freight rates were determined from Anniston, WGK and/or Delaware River. For drum shipments, rates for comparable truckload quantities were obtained.

0237137

NOTE: THERE ARE ABOUT 20 MORE PAGES TO THIS REPORT WHICH WILL BE IN MY FILE IF YOU NEED DATA AND THEY INCLUDE BREAKDOWN ON EACH TYPE OF AROCLOR CUSTOMER

IN 10 REV. 11-66

TOWOLDMON0052438

The freight costs for shipping Biphenyl from Anniston were then added to the Aroclor freight costs to get the total freight cost. Rate from Anniston to WGK is $0.44/cwt. for 20,000-gal. T/C's, and the estimated rate to Delaware River is $1.13/cwt. Depending on the Biphenyl usage, the following proportional freight costs were added:

	WGK	Delaware River
Aroclor 1242	$0.27/cwt.	$0.69/cwt.
Aroclor 1248	.24/cwt.	.62/cwt.
Aroclor 1254	.22/cwt.	.55/cwt.
Aroclor 1260	.19/cwt.	.49/cwt.
Aroclor 1262	.18/cwt.	
Inerteen PPO	.11/cwt.	
Inerteen 54201KA	.15/cwt.	
Pyranol A13B3B	.09/cwt.	

In determining the total quantities to be produced at each plant, it was assumed each customer would be supplied from the plant with the most economical freight cost. The only exceptions were those Electrical Grade Aroclor customers which must be shipped from Anniston because of quality considerations. The total distribution between Anniston and WGK is summarized in Appendix B, and is also "broken down" by end use in Appendix C. If Electrical Grade could be shipped from WGK to all customers, the split would be as follows (in M lbs.):

WGK	1967	1968	1969	1970	1971
Total Aroclors-Actual*	27338	30011	33090	35701	38132
Total Aroclors-Ideal	31438	34211	37390	40151	42472
Anniston					
Total Aroclors-Actual*	42901	44442	46277	47850	49991
Total Aroclors-Ideal	38801	40242	41977	43400	45641

*From Appendix B

Freight savings that would be possible if a manufacturing unit was built at the Delaware River plant were somewhat disappointing considering the quantity of Aroclors which are shipped into the New York and New England area. Lower savings than anticipated would result, since Biphenyl is shipped in a different freight classification at a higher rate than Aroclors.

Also, since most of the Aroclor shipments from Delaware River would be relatively short distances, the freight rates would be higher on a per mile basis. As a result, only $16,700/year in freight savings would be possible on production of 15.2 M lbs. Savings would be as follows:

TOWOLDMON0052439

	Production	Freight Savings
Aroclor 1242-Electrical Grade	12,748 M lbs.	$9,180/year
Aroclor 1254-Electrical Grade	532 M lbs.	3,020/year
Aroclor 1254-Plasticizers	850 M lbs.	1,680/year
Aroclor 1260-Electrical Grade	842 M lbs.	2,230/year
Aroclor 1260-Plasticizers	261 M lbs.	600/year
	15,233 M lbs.	$16,710/year

Of the 15.2 M lbs. which could be produced at Delaware River, approximately 9.0 M lbs. are Electrical Grade A-1242 for G.E. at Hudson Falls, N. Y. Due to the quality considerations, it may be difficult to switch this customer from Anniston material. Therefore, unless additional savings can be generated, it does not appear that this alternate can be justified.

Also attached, Appendix A, is an estimate of the drum requirements at Anniston and WGK for 1967.

M. T. White, Jr.

MTW:wpg
Attach.

0237139

TOWOLDMON0052440

APPENDIX A
Liquid Aroclor
Drum Requirements 1967

	Anniston (M Lbs.)	WGK (M Lbs.)
1242	760	791
1248	1,307	1,632
1254	3,423	4,249
1260	261	157
1262	625	150
1221	130	
1232	420	
Sub-totals	6,926	6,979
Inerteen PPO	781	1,056
Pyranol A13B3B	255	831
Inerteen 54201KA		1,200
Sub-totals	1,036	3,087
TOTALS	7,962 M Lbs.	10,066 M Lbs.

0237140

TOWOLDMON0052441

APPENDIX B
Liquid Aroclor
Requirements (M Lbs.)

Total Aroclors

	1967	1968	1969	1970	1971
WGK					
1242	12,471	14,592	16,950	19,090	20,896
1248	4,131	4,080	3,793	3,488	3,618
1254	5,381	5,745	6,245	6,765	7,015
1260	5,205	5,434	5,932	6,178	6,413
1262	150	160	170	180	190
Totals	27,338	30,011	33,090	35,701	38,132
Anniston					
1242	28,133	29,135	30,180	31,275	33,035
1248	2,651	2,809	2,949	3,111	3,281
1254	7,827	8,106	8,558	8,706	8,856
1260	2,489	2,532	2,703	2,835	2,865
1262	625	619	634	648	657
1221	130	140	150	160	170
1232	1,046	1,101	1,103	1,115	1,127
Totals	42,901	44,442	46,277	47,850	49,991

TOWOLDMON0052442

APPENDIX C
Liquid Aroclor Requirements
by Sales Classification
(M Lbs.)

Aroclor 1242

	1967	1968	1969	1970	1971
WGK					
Queeny-Pydraul Blends	2,637	4,079	6,005	7,555	8,471
WGK - Pydraul Blends	974	833	695	535	535
Plasticizers	5,340	5,950	6,330	6,800	7,310
Electrical Grade	3,000	3,100	3,200	3,300	3,500
Non-electrical Grade	---	---	---	---	---
Therminol FR-1	520	630	720	900	1,080
Totals	12,471	14,592	16,950	19,090	20,896
Anniston					
Plasticizers	400	450	475	510	550
Electrical Grade	26,518	27,330	28,240	29,000	30,500
Non-electrical Grade	400	400	400	400	400
Therminol FR-1	630	770	880	1,100	1,320
Anniston-Misc. Blends	185	185	185	265	265
Totals	28,133	29,135	30,180	31,275	33,035

0237142

TOWOLDMON0052443

Aroclor 1248

	1967	1968	1969	1970	1971
WGK					
Queeny-Pydraul Blends	597	594	488	383	383
WGK - Pydraul Blends	1,948	1,667	1,390	1,072	1,072
Plasticizers	840	910	990	1,020	1,050
Electrical Grade	---	---	---	---	---
Non-electrical Grade	100	100	100	100	100
Therminol FR-2	642	805	820	907	1,007
Misc.	4	4	5	6	6
Totals	4,131	4,080	3,793	3,488	3,618
Anniston					
Plasticizers	1,552	1,695	1,820	1,895	1,965
Electrical Grade	---	---	---	---	---
Non-electrical Grade	348	200	200	200	200
Therminol FR-2	642	805	820	907	1,007
Anniston-Misc. Blends	109	109	109	109	109
Totals	2,651	2,809	2,949	3,111	3,281

0237143

TOWOLDMON0052444

Aroclor 1254

	1967	1968	1969	1970	1971
WGK					
Queeny-Pydraul Blends	433	439	439	439	439
WGK Inerteen Blends	864	1,250	1,470	1,790	1,790
Plasticizers	3,478	3,440	3,690	3,870	4,120
Electrical Grade	130	140	140	125	125
Non-electrical Grade	150	150	150	150	150
Therminol FR-3	135	135	165	200	200
WGK-Misc. Blends	191	191	191	191	191
Totals	5,381	5,745	6,245	6,765	7,015
Anniston					
Ann. - Inerteen Blends	3,470	3,749	4,031	4,249	4,249
Plasticizers	2,130	2,110	2,260	2,380	2,530
Electrical Grade	1,710	1,870	1,870	1,675	1,675
Non-electrical Grade	400	260	260	250	250
Therminol FR-3	65	65	85	100	100
Ann. - Misc. Blends	52	52	52	52	52
Totals	7,827	8,106	8,558	8,706	8,856

0237144

TOWOLDMON0052445

Aroclor 1260

	1967	1968	1969	1970	1971
WGK					
Queeny-Pydraul Blends	283	294	312	261	261
WGK Pydraul Blends	32	35	53	62	62
WGK Inerteen Blends	3,845	4,050	4,402	4,685	4,715
Plasticizers	145	155	165	170	175
Electrical Grade	900	900	1,000	1,000	1,200
Totals	5,205	5,434	5,932	6,178	6,413
Anniston					
Ann. - Inerteen Blends	1,880	1,984	2,140	2,267	2,292
Plasticizers	311	250	265	270	275
Electrical	---	---	---	---	---
Non-Electrical Grade	20	20	20	20	20
Ann. - Misc. Blends	278	278	278	278	278
Totals	2,489	2,532	2,703	2,835	2,865

TOWOLDMON0052446

Aroclor 1262

	1967	1968	1969	1970	1971
WGK					
Plasticizers Sales	150	160	170	180	190
Totals	150	160	170	180	190
Anniston					
Anniston Blends	354	359	363	368	377
Plasticizers	270	260	270	280	280
Totals	625	619	634	648	657

TOWOLDMON0052447

Aroclor 1221

	1967	1968	1969	1970	1971
Anniston					
Plasticizer Sales	130	140	150	160	170
Totals	130	140	150	160	170

TOWOLDMON0052448

Aroclor 1232

	1967	1968	1969	1970	1971
Anniston					
To Queeny - Blends	49	57	60	62	64
Plasticizer Sales	396	443	443	453	463
Non-electrical Grade	600	600	600	600	600
Totals	1,045	1,100	1,103	1,115	1,127

0237148

TOWOLDMON0052449

APPENDIX D - Sales and Freight Costs by Customer and Location

AROCLOR 1232 Customer-Location	(M Lbs.) 1966 Sales	1967 Sales Forecast	From Anniston $/Cwt.	From WGK $/Cwt.	From WGK Inc. Biph. Frt.	From D. R. $/Cwt.	From D. R. Inc. Biph. Frt.	Present Shipping Point-Mode
Non-Electrical								
Wynn Oil Azusa, Calif.	579	500	1.75	1.62	1.94			Ann.-T/C
Plasticizers								
New York		170	1.06	1.02	1.34	.56	1.36	Dr.
Chicago		150		.42	.74			Dr.
Cleveland-Detroit		57	1.37	1.10	1.42	1.12	1.92	Dr.
Los Angeles		35	5.02	4.36	4.68			Dr.

0237149

TOWOLDMON0052450

APPENDIX D - Sales and Freight Costs by Customer and Location

AROCLOR 1242 Customer-Location	(M Lbs.) 1966 Sales	1967 Sales Forecast	From Anniston $/Cwt.	From WGK $/Cwt.	From WGK $/Cwt. Inc. Biph. Frt.	From D. R. $/Cwt.	From D. R. $/Cwt. Inc. Biph. Frt.	Present Shipping Point-Mode
Electrical Grade								
Aerovox Corp. New Bedford, Mass.	1790	1500	1.28	1.29	1.56	.77	1.46	Ann - TC
Cornell Dubilier New Bedford, Mass.	1217	1000	1.28	1.29	1.56	.77	1.46	Ann - TC
Electrical Utilities La Salle, Ill.	823	870		.51	.78			WGK - TT
Electronic Components Bridgeport, Conn.	1378	1400	1.17	1.23	1.50	.385	1.075	Ann - TC
Federal Pacific Elec. Newark, N. J.	664	648	1.11	1.17	1.44	.285	.975	Ann - TC
G. E. Hudson Falls, N. Y.	8667	9200	1.23	1.14	1.41	.475	1.165	Ann - TC
G. E. Rome, Ga.	3805	5100	.16	.615	.885			Ann - TC
Line Material So. Milwaukee, Wisc.	986	1000	1.00	.555	.825	1.08	1.77	WGK - TC
P. R. Mallory Crawfordsville, Ind.	660	800	2.28	.51	.78			WGK - TT
Ohio Brass Mansfield, Ohio	467	300	.85	.70	.97	.77	1.46	WGK - TC
Sangamo Electric Pickens, S. C.	1414	2100	.59					Ann - TT
Sprague Electric Adams, Mass.	1613	1500	1.23	1.17	1.44	.475	1.165	Ann - TC
Westinghouse Bloomington, Ind.	3442	6200	.77	.455	.725	.99	1.68	Ann - TC
Westinghouse Cedars, Miss.	462	600	.605	.72	.99			Ann - TC
G. E. & Westinghouse Toronto, Ontario		1000	1.82	1.69	1.96	1.38	2.07	Ann - TC
Canada		200	2.52	1.71	1.98	1.41	2.10	Ann - DR
New Orleans - Export		370	1.08					Ann - DR

0237150

TOWOLDMON0052451

APPENDIX D - Sales and Freight Costs by Customer and Location

AROCLOR 1242 Cont'd Customer-Location	(M Lbs.) 1966 Sales	1967 Sales Forecast	From Anniston $/Cwt.	From WGK $/Cwt.	From WGK Inc. Biph. Frt.	From D. R. $/Cwt.	From D. R. Inc. Biph. Frt.	Present Shipping Point-Mode
Non-Electrical								
Radiator Specialty Charlotte, N. C.	219	220	.96					Ann. - T/T
Solvay Process Moundsville, W. Va.	81	40	1.60	1.26	1.53	1.04	1.73	Ann. - Dr.
Union Carbide Sistersville, W. Va.	38	55	1.60	1.26	1.53	1.04	1.73	Dr.
Therminol FR-1								
Goodyear								
Pt. Pleasant, W. Va.	167	246	1.14	1.245	1.515	1.41	2.10	WGK - T/T
New York		325	1.06	1.02	1.29	.56	1.25	Dr.
Chicago		171		.42	.69			Dr.
Cincinnati		150	.99	.80	1.07			Dr.
Los Angeles		160	5.02	4.36	4.63			Dr.
Anniston		32	--					Dr.
Plasticizers								
Allied Material Stroud, Okla.	63	100		1.09	1.36			WGK - T/T
Essex Chem. Clifton, N. J.	66	150	1.06	1.02	1.29	.56	1.25	Dr.
National Cash Register Denton, Ohio	4142	4650		.715	.985			WGK - T/T
Products Research Burbank, Calif.	115	100	5.02	2.94	3.21			Dr.
New York		207	1.06	1.02	1.29	.56	1.25	Dr.
Chicago		17		.42	.69			Dr.
Cincinnati-Cleveland		95		1.10	1.37	1.12	1.81	Dr.
Los Angeles		26	5.02	4.36	4.63			Dr.
Anniston		27	--					Dr.
Houston		78	1.70	1.35	1.62			Dr.
St. Louis		70		--				Dr.
New York-Export		0-		--				Dr.

0237151

TOWOLDMON0052452

APPENDIX D - Sales and Freight Costs by Customer and Location

AROCLOR 1248 Customer-Location	(M Lbs.) 1966 Sales	1967 Sales Forecast	From Anniston $/Cwt.	From WGK $/Cwt.	From WGK $/Cwt. Inc. Biph. Frt.	From D. R. $/Cwt.	From D. R. $/Cwt. Inc. Biph. Frt.	Present Shipping Point-Mode
Non-Electrical								
Belray Co., Inc. Farmingdale, N. J.	40	35	3.04			.96	1.58	Ann.-Dr.
Goodyear Ft. Pleasant, W. Va.	211	88	1.14	1.245	1.485	1.41	2.03	Dr.
Therminol FR-2								
Burlington, Ind. Alta Vista, Va.	48	50	2.14	2.44	2.68	1.52	2.14	Ann.-Dr.
Hooker Chemical Niagara Falls, N. Y.	79	40	1.79	1.32	1.56	1.04	1.66	Dr.
New York		296	1.06	1.02	1.26	.56	1.18	Dr.
Chicago		36		.42	.66			Dr.
Cleveland-Detroit		250	1.37	1.10	1.34	1.12	1.74	Dr.
Anniston		183	—					Dr.
Houston		150	1.70	1.35	1.59			Dr.
St. Louis		283		—				Dr.
Los Angeles		110	5.02	4.36	4.60			Dr.
New Orleans-Export		84	1.08					Dr.

0237152

TOWOLDMON0052453

APPENDIX D - Sales and Freight Costs by Customer and Location

AROCLOR 1248 CONT. Customer-Location	(M Lbs.) 1966 Sales	1967 Sales Forecast	From Anniston $/Cwt.	From WGK $/Cwt.	From WGK Inc. Biph. Frt.	From D. R. $/Cwt.	From D. R. Inc. Biph. Frt.	Present Shipping Point-Mode
Plasticizers								
du Pont Parlin, N. J.	827	850	1.09	1.15	1.39	.215	.835	WGK - T/C
Buffalo Solvents Buffalo, N. Y.	170	185	1.79	1.32	1.56	1.04	1.66	WGK - Dr.
W. R. Grace Chicago, Ill.	61	75		.42	.66			WGK - Dr.
Southern Solvents New Orleans	235	300	—					Ann.- Dr.
New York-Export		92		—				WGK - Dr.
New York		192	1.06	1.02	1.26	.56	1.18	Dr.
Chicago		142		.42	.66			Dr.
Cleveland		117	1.37	1.10	1.34	1.12	1.74	Dr.
Anniston		25	—					Dr.
St. Louis		59		—				Dr.
Los Angeles		66	5.02	4.36	4.60			Dr.

0237153

TOWOLDMON0052454

APPENDIX D - Sales and Freight Costs by Customer and Location

AROCLOR 1254 Customer-Location	(M Lbs.) 1966 Sales	1967 Sales Forecast	From Anniston $/Cwt.	From WGK $/Cwt.	From WGK Inc. Biph. Frt.	From D. R. $/Cwt.	From D. R. Inc. Biph. Frt.	Present Shipping Point-Mode
Electrical								
Aerovox Corp. New Bedford, Mass.	37	39	3.45	3.13	3.35	1.60	2.15	Ann - DR
Baker Castor Oil Bayonne, N. J.	69	80	1.84			.58	1.13	Ann - DR
Cornell Dubilier New Bedford, Mass.	155	95	1.63	1.61	1.83	.95	1.50	Ann - DR
Electrical Utilities La Salle, Ill.	50	55		1.28	1.50			WGK - DR
Filton Co., Inc. Flushing, N. Y.	216	180	1.84			.59	1.14	Ann - DR
G. E. Hudson Falls, N. Y.	100	100	1.23	1.14	1.36	.475	1.025	Ann - TC
Sangamo Electric Pickens, S. C.	102	100	.52					Ann - DR
Sprague Electric Adams, Mass.	87	38	3.41	2.87	3.09	1.49	2.04	Ann - DR
New Orleans - Export		860	1.08					Ann - DR
Mexico - Export		350	1.38	1.37	1.59			Ann - DR
Non-Electrical								
Cincinnati Mill. Mach. Cincinnati, Ohio	198	294	.545	.535	.755			Ann - TC
Penn Refining Cleveland, Ohio	20	50	1.37	1.10	1.32	1.12	1.67	WGK - DR
Std. Oil of Ohio Cleveland, Ohio	93	90	1.37	1.10	1.32	1.12	1.67	AGK - DR
Therminol FR -3								
West Bend Co. West Bend, Wisc.	86	90		1.07	1.29			WGK - DR

0237154

TOWOLDMON0052455

APPENDIX D - Sales and Freight Costs by Customer and Location

AROCLOR 1254 Cont'd

Customer-Location	(M Lbs.) 1966 Sales	1967 Sales Forecast	From Anniston $/Cwt.	From WGK $/Cwt.	From WGK Inc. Biph. Frt.	From D. R. $/Cwt.	From D. R. Inc. Biph. Frt.	Present Shipping Point-Mode
Plasticizers								
Allegany Solvents Pittsburgh, Pa.	72	85	1.62	1.18	1.40	1.00	1.55	DR
AMSCO Carteret, N. J.	255	260	1.06	1.02	1.24	.56	1.11	DR
AMSCO Conschochen, Pa.	308	325	1.76	1.42	1.64	.39	.94	DR
Amsco Solvents Cincinnati, Ohio	264	325	.99	.80	1.02			DR
Central Solvents Santa Fe Springs, Calif.	235	345	5.02	2.94	3.16			DR
Central Solvents Chicago, Ill.	235	240		.42	.64			DR
Essex Chem. Clifton, N. J.	152	200	1.13	1.02	1.24	.56	1.11	DR
W. R. Grace No. Bergen, N. J.	95	150	2.02			.385	.935	Ann - TT
Inertol Newark, N. J.	106	175	1.13	1.02	1.24	.56	1.11	DR
Minnesota Mining Wayne, Mich.	185	155	1.80	1.275	1.495			WGK - TT
Minnesota Mining Los Angeles, Calif.	185	155	5.02	4.36	4.58			DR
Missouri Solvents St. Louis, Mo.	81	130		---				DR
Ohio Solvents Cleveland, Ohio	96	85	1.37	1.10	1.32	1.12	1.67	DR
Products Research Burbank, Calif.	255	260	5.02	2.94	3.16			DR
Sherwin Williams Cleveland, Ohio	55	62	1.37	1.10	1.32	1.12	1.67	DR
Sherwin Williams Chicago, Ill.	59	63		.42	.64			DR
Sonneborn Belleville, N. J.	381	300	1.06	1.02	1.24	.56	1.11	DR
Std. T Chem. New York, N. Y.	83	95	1.06	1.02	1.24	.56	1.11	DR

0237155

APPENDIX D - Sales and Freight Costs by Customer and Location

AROCLOR 1254 Cont'd (Plasticizers) Customer-Location	(M Lbs.) 1966 Sales	1967 Sales Forecast	From Anniston $/Cwt.	From WGK $/Cwt.	Inc. Biph. Frt.	From D. R. $/Cwt.	Inc. Biph. Frt.	Present Shipping Point-Mode
Texas Solvents Houston, Texas	123	150	1.70	1.35	1.57			DR
Texas Solvents Dallas, Texas	67	85	1.70	1.35	1.57			DR
Western Solvents Detroit, Mich.	295	450		---				DR
Wisconsin Solvents Milwaukee, Wisc.	196	300		.91	1.13			DR
New York - Export		308	---					DR
New York		382	1.06	1.02	1.24	.56	1.11	DR
Chicago		221		.42	.64			DR
Cleveland		415	1.37	1.10	1.32	1.12	1.67	DR
Anniston		129	---					DR
Houston		44	1.70	1.35	1.57			DR
St. Louis		97		---				DR
Los Angeles		140	5.02	4.36	4.58			DR

023156

TOWOLDMON0052457

APPENDIX D - Sales and Freight Costs by Customer and Location

AROCLOR 1260 Customer-Location	(M Lbs.) 1966 Sales	1967 Sales Forecast	From Anniston $/Cwt.	From WGK $/Cwt.	From WGK Inc. Biph. Frt.	From D. R. $/Cwt.	From D. R. Inc. Biph. Frt.	Present Shipping Point-Mode
Electrical								
G. E. Pittsfield, Mass.	640	842	1.23	1.17	1.36	.475	.965	WGK - T/C
Plasticizers								
AMSCO Carteret, N. J.	38	80	1.06	1.02	1.21	.56	1.05	Dr.
Central Solvents Chicago, Ill.	42	75		.42	.61			Dr.
Sonneborn Belleview, N. J.	41	65	1.76	1.63	1.82	.39	.88	Dr.
New York		45	1.06	1.02	1.21	.56	1.05	Dr.
Chicago		42		.42	.61			Dr.
St. Louis		40		—				Dr.
New York-Export		71	1.06	1.02	1.21	.56	1.05	Dr.

0237157

TOWOLDMON0052458

APPENDIX D - Sales and Freight Costs by Customer and Location

INERTEEN PPO

Customer-Location	(M Lbs.) 1966 Sales	1967 Sales Forecast	From Anniston $/Cwt.	From WGK $/Cwt.	From WGK Inc. Biph. Frt.	From D. R. $/Cwt.	From D. R. Inc. Biph. Frt.	Present Shipping Point-Mode
Allis Chalmers Pittsburgh, Pa.	1330	1800	.98	.83	.94			WGK - TC
Esco Mfg. Co. Houston, Texas	148	200	1.70	1.35	1.61			Ann - DR
Federal Pacific Elec. Newark, N. J.	119	165	1.13	1.50				DR
Hevi-Duty Elec. Milwaukee, Wisc.	30	50						WGK - DR
ITE Philadelphia, Pa.	2162	2000	1.04	1.12	1.23			Ann - TC
Moloney Elec. St. Louis, Mo.	204	280		.20	.31			WGK - TC
Niagara Transformer Buffalo, N. Y.	470	450	1.59	1.40	1.51			WGK - TC
H. K. Porter Belmont, Calif.	71	110	5.02	4.36	4.47			DR
Research Cottrell Bound Brook, N. J.	232	100	1.06	1.02	1.13			Ann - DR
Std. Transformer Warren, Ohio	378	550	.98	.80	.91			WGK - TC
R. E. Uptegraff Mfg. Scottsdale, Pa.	258	300		1.32	1.43			WGK - TC
Wagner Electric St. Louis, Mo.	101	125		---				WGK - DR
Westinghouse St. Catherine, Ontario		250	1.86	1.69	1.80			WGK - TC
Westinghouse Hamilton, Ontario		250	1.99	1.62	1.73			WGK - TC
Mexico - Export		180	1.38	1.37	1.48			Ann - DR
New Orleans - Export		176	1.08					Ann - DR
Canada - Export		570						WGK - DR
New York		121	1.06	1.02	1.13			DR
Chicago		66		.42	.53			DR
Anniston		39	---					DR
Los Angeles		89	5.02	4.36	4.47			DR
St. Louis		41		---				DR

0231158

TOWOLDMON0052459

APPENDIX D - Sales and Freight Costs by Customer and Location

INERTEEN A13B3B

Customer-Location	(M Lbs.) 1966 Sales	(M Lbs.) 1967 Sales Forecast	From Anniston $/Cwt.	From WGK $/Cwt.	From WGK Inc. Biph. Frt.	From D. R. $/Cwt.	From D. R. Inc. Biph. Frt.	Present Shipping Point-Mode
G. E. Rome, Ga.	155	139	---					Ann - DR
Glenn Pacific Oakland, Calif.	141	100	5.02	4.36				WGK - DR
Kuhlman Electric Crystal Springs, Miss.	64	70	.85					Ann - DR
Radio Eng. Lab. Long Island, N. Y.	57	24	1.06	1.02				WGK - DR
Mexico - Export		80	1.38	1.39				Ann - DR
New Orleans - Export		50	1.08					Ann - DR
G. E. Guelph, Ontario		300	2.16	1.62				WGK - TC
G. E. Peterboro, Ontario		350	1.70	1.78				WGK - TC
Canada - Export		370	2.52	1.71				WGK - DR
New York		67	1.06	1.02				DR
Chicago		143		.42				DR
Anniston		68	---					DR
Los Angeles		80	5.02	4.36				DR
Houston		43	1.70	1.35				DR
St. Louis		34		---				DR

0237159

TOWOLDMON0052460

APPENDIX D - Sales and Freight Costs by Customer and Location

INERTEEN 54201KA

Customer-Location	(M Lbs.) 1966 Sales	(M Lbs.) 1967 Sales Forecast	From Anniston $/Cwt.	From WGK $/Cwt.	From WGK Inc. Biph. Frt.	From D. R. $/Cwt.	From D. R. Inc. Biph. Frt.	Present Shipping Point-Mode
Westinghouse Phoenix, Ariz.	101	102	2.20	2.06	2.21			Ann - TC
Westinghouse Sharon, Pa.	3693	4200	.98	.80	.95			Ann - TC
Westinghouse Canada		1200	2.52	1.71	1.86			WGK - DR

0237160

TOWOLDMON0052461