

PPG INDUSTRIES
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

[illegible]

LABORATORY PRODUCT REPORT

LABORATORY PRODUCT REPORT														
EDC SHIPMENTS	1973 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG.
TRANS 1,2, DICHLOROETHYLENE PPM	1	0	0	(1	0	0	0	0	0	0	0	0	0	0
1,1 DICHLOROETHANE PPM	16	22	27	26	14	17	16	11	18	13	16	11	17	17
CIS 1,2 DICHLOROETHYLENE PPM	5	4	3	5	6	5	4	5	4	4	4	3	32	7
CHLOROFORM PPM	24	66	43	26	21	19	27	32	13	23	23	53	55	33
ETHYLENE DICHLORIDE %	99.987	99.983	99.981	99.983	99.989	99.988	99.987	99.986	99.988	99.983	99.983	99.979	99.976	99.984
TRICHLOROETHYLENE PPM	8	(1	0	0	0	0	0	2	0	0	1	52	37	7
PERCHLOROETHYLENE PPM	(1	0	9	0	(1	14	0	0	5	9	37	41	13	10
1,1,2 TRICHLOROETHANE PPM	7	(1	36	30	11	14	15	17	31	46	42	33	48	27
ETHYLENE CHLOROBROMIDE PPM	11	14	0	14	0	2	3	3	11	7	10	4	12	7
ETHYL CHLORIDE PPM	40	23	44	44	31	26	39	52	29	27	22	8	13	30
COLOR (APHA)	7	8	8	7	7	5	6	7	6	5	6	6	8	7
APPEARANCE	Clear	Clear	Clear	Clear	Clear	Clear	Clear	CLEAR	CLEAR	Clear	CLEAR	CLEAR	CLEAR	CLEAR
ACIDITY PPM	(1	(1	2	(1	(1	(1	(1	(1	1	1	(1	(1	(1	(1
WATER PPM	45	49	64	38	39	51	89	50	27	50	41	38	38	48
NON-VOLATILES PPM	3	(1	(1	6	(1	(1	(1	(1	(1	5	5	(1	(1	1
TOTAL IRON PPM	0.17	0.24	0.49	0.23	0.10	0.20	0.28	0.14	0.21	0.28	0.25	0.27	0.24	0.24
SPECIFIC GRAVITY 60°/60°F	1.262	1.263	1.262	1.262	1.262	1.261	1.262	1.261	1.262	1.261	1.260	1.263	1.263	1.262
CONFIDENTIAL Subject to Protective Order of 14th Judicial District Court No. 91-1145														

SL 013362

PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

LABORATORY PRODUCT REPORT

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

SL 013363

PPG INDUSTRIES
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
LABORATORY PRODUCT REPORT

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 01-1145

SL 013364

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
LABORATORY PRODUCT REPORT

TRICHLOR SHIPMENTS	1973 AVG.	JAN	FEB	MAR *	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG.
TYPE 122 (Degreasing & Solvent Grade)														
COLOR APHA	8	7	9	8	8	7	10	9	7	5	7	(5	6	7
SPECIFIC GRAVITY 20/20 °C	1.461	1.460	1.460	1.460	1.460	1.460	1.462	1.462	1.462	1.460	1.462	-	1.461	1.461
DISTILLATION RANGE °C														
LOW	86.1	86.1	86.1	86.1	86.0	86.1	86.1	86.0	86.0	86.1	86.2	-	86.1	86.1
HIGH	87.6	87.7	87.8	87.9	87.7	87.7	87.9	87.8	87.5	87.5	87.4	-	88.0	87.7
WATER CONTENT CLOUD POINT °C	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10
NON-VOLATILE %	.0013	.0014	.0016	.0012	.0006	.0002	.0006	.0012	-	.0003	.0005	-	.0005	.0008
ACID ACCEPTANCE % AS NaOH	0.14	.14	.14	.15	.15	.16	.16	.19	-	.19	.19	-	.20	0.17
pH	7.7	7.4	7.7	9.0	9.0	9.0	9.0	8.9	9.1	9.1	9.1	9.2	9.3	8.8
Acidity/Alkalinity	.0003	.0002	.0003	.0017	.0019	.0020	.0019	.0017	.0026	.0026	.0024	.0030	.0028	.0019
TYPE E,110														
COLOR APHA	8													
SPECIFIC GRAVITY 20/20 °C														
DISTILLATION RANGE °C														
LOW														
HIGH														
WATER CONTENT CLOUD POINT °C	(-10													
NON-VOLATILE %														
ACID ACCEPTANCE % AS NaOH														
TYPE 113 (High Purity Grade)														
COLOR APHA	7	7	7	7	7	7	8	7	6	6	(5	(5	6	6
SPECIFIC GRAVITY 20/20 °C														
DISTILLATION RANGE °C														
LOW														
HIGH														
WATER CONTENT CLOUD POINT °C	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10	(-10
NON-VOLATILE %	.0002	.0002	.0005	.0004	.0003	.0002	.0004	.0005	.0004	.0006	.0005	.0003	.0003	.0004
SL 013365														
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*Type 122 is Type 132 subsequence to Feb.

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
LABORATORY PRODUCT REPORT

PERCHLOR SHIPMENTS	1973 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG.
TYPE 207														
COLOR APHA	10	11	10	9	11	9	11	14	10	15	15	10	12	11
SPECIFIC GRAVITY 20/20 °C														
DISTILLATION RANGE °C														
LOW														
HIGH														
WATER CONTENT CLOUD POINT °C	(0	(0	(0	(0	(0	(0	(0	(0	(0	(0	(0	(0	(0	(0
NON-VOLATILE wt. %														
PH	8.2	8.3	8.1	8.3	8.3	8.3	8.3	8.3	8.4	8.2	8.4	8.5	8.5	8.3
ACID ACCEPTANCE % AS NaOH														
COPPER CORROSION														
ACIDITY ML OF 0.01 N NaOH														
FLASK MG/30 CM ²														
SOXHLET MG/30 CM ²														
CONDENSER MG/30 CM ²														
CHLORIDES PPM														
TYPE 208														
COLOR APHA	9	10	10	8	10	8	10	12	9	11	10	7	10	10
SPECIFIC GRAVITY 20/20 °C	1.625	1.624	1.624	1.624	1.624	1.625	1.626	1.627	-	1.626	1.625	-	1.624	1.625
DISTILLATION RANGE °C														
LOW	120.8	120.8	120.9	120.7	120.8	120.9	120.8	120.8	-	120.9	120.9	-	120.8	120.8
HIGH	121.6	121.7	121.6	121.6	121.6	121.8	121.7	121.7	-	121.7	121.7	-	121.7	121.7
WATER CONTENT CLOUD POINT °C	(0	(0	(0	(0	(0	(0	(0	(0	(0	(0	(0	(0	(0	(0
NON-VOLATILE wt. %	.0003	.0003	.0002	.0006	.0001	.0006	.0001	.0006	-	.0005	.0002	-	.0005	.0003
PH	6.6	6.5	6.8	6.7	6.5	6.5	6.5	6.4	6.8	6.8	6.5	6.6	6.6	6.6
COPPER CORROSION														
ACIDITY ML OF 0.01 N NaOH	1	2	1	1	2	2	1	1	-	2	2	-	2	2
FLASK MG/30 CM ²	2	1	2	1	(1	2	1	(1	-	2	1	-	1	1
SOXHLET MG/30 CM ²	6	7	8	9	5	5	6	6	-	7	7	-	7	7
CONDENSER MG/30 CM ²	7	3	10	10	5	6	6	9	-	7	8	-	7	8
CHLORIDES PPM	0.13	0.11	0.11	(.06	.18	.10	(0.06	0.06	-	0.10	0.16	-	0.08	0.09
CONFIDENTIAL:														
Subject to Protective Order														
of 14th Judicial District Court														
No. 91-1145														

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PPG. II JSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

LABORATORY PRODUCT REPORT

PERCHLOR SHIPMENTS	1973 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG.
TYPE 203														
COLOR	APHA													
SPECIFIC GRAVITY	20/20 °C													
DISTILLATION RANGE	°C													
Low														
High														
WATER CONTENT	CLOUD POINT °C													
NON-VOLATILE	wt. %													
PH														
ACID ACCEPTANCE	% AS NaOH													
COPPER CORROSION														
Acidity mL of 0.01 N NaOH														
FLASK MG/30 CM ²														
SOXHLET MG/30 CM ²														
CONDENSER MG/30 CM ²														
CHLORIDES	PPM													
TYPE 209														
COLOR	APHA													
SPECIFIC GRAVITY	20/20 °C													
DISTILLATION RANGE	°C													
Low														
High														
WATER CONTENT	CLOUD POINT °C													
NON-VOLATILE	wt. %													
PH														
ACID ACCEPTANCE	% AS NaOH													
COPPER CORROSION														
Acidity mL of 0.01 N NaOH														
FLASK MG/30 CM ²														
SOXHLET MG/30 CM ²														
CONDENSER MG/30 CM ²														
CHLORIDES	PPM													

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No. 91-1145

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PPG INDUSTRIES
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
LABORATORY PRODUCT REPORT

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PPG INDUSTRIES

LAKE CHARLES, LOUISIANA

LABORATORY PRODUCT REPORT

		CONFIDENTIAL:	
	Subject to Protective Order		
of	14th Judicial District Court		
	No. 91-1145		

SL 013370

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

[illegible]

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

		CONFIDENTIAL:	
Subject to Protective Order			
of 14th Judicial District Court			
	No. 91-1145		

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PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

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PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

"TRI-ETHANE" @	1973 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG.
TCE REACTOR WT. %														
ETHYL CHLORIDE	(0.01	0	0	(0.01	(0.01	0	0	0	0	0	0	0	0	(0.01
CIS 1,2 DICHLOROETHYLENE	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	0	0	0	0	0	0	(0.01
1,2 DICHLOROETHANE	65.28	63.40	64.42	62.69	62.43	62.63	60.63	63.63	63.82	61.16	61.63	57.24	59.16	61.90
TRICHLOROETHYLENE	(0.01	(0.01	0.01	0.01	(0.01	(0.01	0.02	0.03	0.03	(0.01	(0.01	0.01	(0.01	0.02
1,1,2 TRICHLOROETHANE	31.06	32.60	31.54	32.88	32.77	32.71	33.86	31.33	30.35	33.48	33.67	36.64	35.40	33.11
U-TETRACHLOROETHANE	1.59	1.74	1.74	1.96	1.95	1.95	2.04	1.73	1.59	2.00	2.02	2.72	2.47	1.99
S-TETRACHLOROETHANE	1.90	2.04	2.04	2.29	2.30	2.29	2.40	2.02	1.89	2.36	2.39	3.07	2.65	2.31
PENTACHLOROETHANE	0.06	0.06	0.07	0.08	0.09	0.10	0.11	0.13	0.20	0.09	0.08	0.13	0.08	0.10
Fe PPM	3	2	3	3	5	13	20	13	12	14	22	27	56	16
HEAVIES STILL REFLUX WT. % *														
CIS 1,2 DICHLOROETHYLENE	(0.01	0	0	0	0	0	0	0	0	(0.01	(0.01	36	61	48**
1,2 DICHLOROETHANE	(0.01	0	0	(0.01	(0.01	0	0	(0.01	0	0	(0.01	0	6	3**
TRICHLOROETHYLENE	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	0	0.01	(0.01	(0.01	(0.01	58	139	98**
1,1,2 TRICHLOROETHANE	99.97	99.99	99.98	99.97	99.96	99.98	99.98	99.78	99.91	99.95	99.74	99.95	99.89	99.92
U-TETRACHLOROETHANE	0.01	(0.01	(0.01	0.02	(0.01	(0.01	(0.01	0.80	(0.01	(0.01	0.01	493	420	456**
H ₂ O PPM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fe PPM	(1	0.4	(0.1	0.08	(1	(1	(1	2	-	-	(1	(1	(1	(1
LIGHT STILL REFLUX PPM														
H ₂ O	-													
Fe	2	2	2	3	3	6	4	5	6	4	5	2	2	4

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Subject to Protective Order
of U.S. District Court
No. 11-1145

SL 013378

*Subsequent to Nov. values will be reported in PPM
** Average in PPM

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

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SL 013379

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Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

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CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 01-1145

* Subsequent to Nov. values will be reported in PPM
** Average in PPM

PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

'TRI-ETHANE'®	1973 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG.
TYPE 324 STABILIZATION WT. %														
VINYLIDENE CHLORIDE	0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	0.02	0.01	0.02	0.01	0.02	0.01
BLM	0.39	0.55	0.46	0.52	0.51	0.40	0.43	0.49	0.46	0.48	0.49	0.46	0.50	0.48
BTE	0.76	1.04	0.82	0.76	0.79	0.76	0.79	0.81	0.78	0.77	0.73	0.81	0.87	0.81
METHYL CHLOROFORM	94.02	93.52	93.78	93.86	93.68	94.07	93.89	94.11	93.87	94.03	93.85	93.77	93.48	93.83
DOL	1.00	1.06	1.06	1.07	1.05	1.00	0.98	0.88	0.97	0.93	1.01	1.03	1.04	1.01
CIS 1,2-DICHLOROETHYLENE	0	(0.01	0	0	0	0	(0.01	0.03	0.04	0	0.01	0.01	0.04	0.01
TRICHLOROETHYLENE	(0.01	(0.01	(0.01	0	0	0	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01
1,2-DICHLOROETHANE	0.03	0.02	0.02	0.04	0.03	0.03	0.04	0.07	0.02	(0.01	0.0	0.0	0.0	0.02
IBL	0.37	0.36	0.06	0.02	(0.01	0	0	0	0.11	0.73	0.84	0.83	0.87	0.32
NRE	2.19	2.12	2.05	2.05	2.25	2.06	2.10	1.92	2.10	2.07	2.08	2.04	2.22	2.09
NITROETHANE	0.06	0.06	0.10	0.11	0.08	0.10	0.11	0.09	0.03	0	0	0	0	0.06
NPL	0.65	0.42	0.75	0.79	0.79	0.78	0.78	0.50	0.72	0.08	(0.01	(0.01	0.01	0.47
TLE	0.80	0.82	0.75	0.76	0.78	0.72	0.77	0.70	0.80	0.80	0.89	0.85	0.89	0.79
1,1,2-TRICHLOROETHANE	0.04	0.05	0.10	0.07	0.06	0.06	0.11	0.11	0.08	0.07	0.06	0.08	0.08	0.08
STABILIZING TANKS														
MOISTURE PPM	46	54	63	57	52	62	50	44	66	61	29	47	44	52
PH	7.0	7.0	7.0	6.9	6.9	6.9	6.8	6.8	6.9	6.8	6.8	6.8	6.7	6.9
HCL ACIDITY PPM	(1	(1	(1	2	1	1	1	2	1	2	2	2	2	1
NON-VOLATILE RESIDUE %	.0002	.0002	.0002	.0002	.0003	.0002	.0002	.0002	.0004	.0002	.0003	.0002	.0002	.0002
COLOR APHA	6	5	6	6	6	6	7	9	5	(5	(5	(5	6	5
SPECIFIC GRAVITY	1.305	1.306	1.305	1.305	1.304	1.305	1.305	1.305	1.304	1.304	1.304	1.304	1.304	1.305
AVG. DISTILLATION RANGE °C														
LOW	73.2	73.0	72.8	72.8	72.8	72.8	72.8	72.8	72.8	73.2	73.4	73.4	73.4	73.0
HIGH	82.7	82.7	82.8	82.2	82.2	82.3	82.5	82.8	83.1	82.8	82.8	83.3	83.3	82.9
SOLUBLE CHLORIDES PPM	(0.5	(0.5	(0.5	(0.5	(0.5	(0.5	(0.5	(0.5	(0.5	(0.5	(0.5	(0.5	(0.5	(0.5
CONFIDENTIAL:														
Subject to Protective Order														
of 14th Judicial District Court														
No. 91-1145														

SL 013381

PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

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PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
LABORATORY OPERATIONS REPORT

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PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

TRICHLOR STABILIZATION	1973 AVG.	JAN	FEB	MAR *	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG.
TYPE 115 WT. %														
CARBON TETRACHLORIDE	(0.01													
ADH	0.03													
NPL	(0.01													
TRICHLOROETHYLENE	99.46													
PERCHLOROETHYLENE	(0.01													
1,1,2-TRICHLOROETHANE	0.02													
UNIDENTIFIED, TOTAL	(0.01													
TYPE 122 WT. %														
CARBON TETRACHLORIDE	(0.01	0.02	0.01	(0.01	0	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01
ADH	0.03	0.03	0.04	-	-	-	-	-	-	-	-	-	-	0.04
NPL	0.16	0.16	0.16	0.13	0.16	0.14	0.14	0.14	0.14	0.13	0.13	0.14	0.14	0.14
TRICHLOROETHYLENE	99.52	99.46	99.48	99.59	99.47	99.40	99.38	99.39	99.46	99.39	99.37	99.35	99.38	99.43
PERCHLOROETHYLENE	(0.01	0	(0.01	-	(0.01	0	0	0	0	0	0	0	0	(0.01
1,1,2-TRICHLOROETHANE	0.02	0.01	0.02	0.01	0.02	0.01	0.01	0.01	0.02	0.02	0.03	0.02	0.02	0.02
GDL	0.06	0.06	0.06	0	-	-	-	-	-	-	-	-	-	0.06
UNIDENTIFIED, TOTAL	(0.01	(0.01	(0.01	(0.01	(0.01	0.01	0.01	0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01
NMP				0.027	0.03	0.03	0.03	0.03	0.026	0.028	0.028	0.031	0.030	0.029
NRE				0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.06
DPE				.0093	.0150	.0110	.0110	0.014	0.010	0.013	0.009	0.010	0.009	0.011
SL 013384														

CONFIDENTIAL
 Subject to Protective Order
 of 14th Judicial District Court
 No. 91-1145

* Type 122 is Type 132 Subsequent to Feb.

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

TRICHLOR STABILIZATION		1973 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG.
TYPE 110E	WT. %														
CARBON TETRACHLORIDE		0.01													
ADH		0.08													
NPL		0.32													
TRICHLOROETHYLENE		98.88													
PERCHLOROETHYLENE		0													
1,1,2-TRICHLOROETHANE		0.03													
GOL		0.12													
UNIDENTIFIED, TOTAL		(0.01													
TYPE 113	WT. %														
CARBON TETRACHLORIDE		(0.01	(0.01	0.01	(0.01	0	(0.01	(0.01	(0.01	0	(0.01	(0.01	(0.01	0	(0.01
NPL		(0.01	0	0	0	0	0	0	0	0	0	0	0	0	0
TRICHLOROETHYLENE		99.97	99.98	99.97	99.98	99.99	99.99	99.98	99.98	99.98	99.96	99.98	99.98	99.98	99.98
PERCHLOROETHYLENE		(0.01	0	0	0	0	0	0	0	(0.01	(0.01	0	0	(0.01	(0.01
1,1,2-TRICHLOROETHANE		0.02	0.01	0.01	(0.01	(0.01	(0.01	0.01	(0.01	(0.01	0.01	0.02	0.01	0.02	0.01
UNIDENTIFIED, TOTAL		(0.01	(0.01	(0.01	0	0	0	0	0.01	(0.01	(0.01	(0.01	(0.01	0	(0.01
SL 013385		CONFIDENTIAL: Subject to Protective Order of 14th Judicial District Court No. 91-1145													

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

[illegible]

SL 013386

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

PPG INDUSTRIES
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
LABORATORY OPERATIONS REPORT

VINYL CHLORIDE		1973 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG.
FEED TO UNIT % EDC		99.98	99.97	99.98	99.98	99.98	99.99	99.99	99.99	99.99	99.99	99.97	99.96	99.99	99.98
VAPORIZING FURNACE															
FEED															
VINYLDIENE CHL RIDE	WT. %	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01	0.01	(0.01	(0.01	(0.01	(0.01	(0.01	(0.01
1,1-DICHLOROETHANE	WT. %	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.04	0.05	0.04
CHLOROF RM	WT. %	0.05	0.02	0.04	0.03	0.39	0.14	0.03	0.02	0.03	0.23	0.14	0.20	0.27	0.13
1,2-DICHLOROETHANE	WT. %	99.78	99.88	99.86	99.87	99.13	99.62	99.82	99.85	99.84	99.53	99.72	99.68	99.31	99.68
OTHERS	WT. %	0.01	0.01	(0.01	(0.01	0.01	(0.01	(0.01	(0.01	(0.01	0.03	0.01	0.01	0.01	0.01
H ₂ O	PPM	41	56	29	76	65	76	89	87	96	67	76	33	51	67
HCl	WT. %	0.03	0.03	0.04	0.02	0.02	0.04	0.08	0.02	0.03	0.04	0.02	0.01	0.01	0.03
Fe	PPM	0.20	0.24	0.89	0.24	0.35	0.35	0.48	0.33	0.18	0.23	0.22	0.51	0.46	0.37
Cl ₂	PPM	(1	(1	(1	(1	(1	(1	(1	(1	(1	(1	(1	(1	(1	(1
ABSORBER-STRIPPER COLUMNS															
QUENCH LIQUOR															
VINYL CHLORIDE	WT. %	9.86	10.68	3.39	-	-	-	-	-	-	-	-	-	-	7.04
VINYLDIENE CHL RIDE	WT. %	(0.01	0.02	0.01	-	-	-	-	-	-	-	-	-	-	0.02
1,1,2 DICHLOROETHYLENE	WT. %														
1,1-DICHL R ETHANE	WT. %	0.07	0.04	0.06	-	-	-	-	-	-	-	-	-	-	0.05
CHLOR PRENE	WT. %	0.02	0.02	0.01	-	-	-	-	-	-	-	-	-	-	0.02
CHL R FORM	WT. %	0.06	0.03	0.05	-	-	-	-	-	-	-	-	-	-	0.04
1,2-DICHLOROETHANE	WT. %	89.41	89.16	96.44	-	-	-	-	-	-	-	-	-	-	92.80
OTHERS	WT. %	0.08	0.04	0.03	-	-	-	-	-	-	-	-	-	-	0.04
H ₂ O	PPM	191	213	150	-	-	134	101	79	146	179	219	44	194	146
HCl	WT. %	0.85	0.93	0.98	-	-	-	-	-	-	-	-	-	-	0.96
Fe	PPM	12.05	17.46	61.28	-	-	13.70	14.99	3.45	10.31	2.60	12.27	19.33	4.40	23.23
FURNACE FEED % CCl ₄		0.04	(0.01	(0.01	(0.01	0.34	0.09	(0.01	(0.01	0.01	0.08	0.02	0.01	0.04	0.05

SL 013387

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 94-1115

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
LABORATORY OPERATIONS REPORT

[illegible]

PPG INDUSTRIES
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
LABORATORY OPERATIONS REPORT

[illegible]

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

VINYL CHLORIDE	1973 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG.
HEAVIES STILL														
FEED														
VINYLDIENE CHLORIDE WT. %	(0.01	0.02	0.02	(0.01	0.02	(0.01	(0.01	(0.01	(0.01	0.02	(0.01	0.02	0.02	0.01
1,1-DICHLOROETHANE WT. %	0.06	0.05	(0.01	0.06	0.07	0.07	0.08	0.08	0.07	0.08	0.08	0.08	0.10	0.07
C-1,2-DICHLOROETHYLENE WT. %					(0.01	0	0	0	0	0	0	0	0	(0.01
CHLOROFORM WT. %	0.07	0.03	0.06	0.05	0.84	0.20	0.05	0.03	0.04	0.44	0.20	0.21	0.50	0.22
1,2-DICHLOROETHANE WT. %	99.31	99.68	99.58	99.82	98.07	99.69	99.48	99.65	99.63	98.65	98.90	99.32	98.03	99.21
1,1,2-TRICHLOROETHANE WT. %	0.19	0.15	0.18	0.02	0.12	0.10	0.18	0.11	0.15	0.18	0.27	0.05	0.05	0.13
OTHERS WT. %	0.06	0.03	0.02	0.04	0.02	0.04	0.06	0.04	0.02	0.02	0.08	0.03	0.13	0.05
H ₂ O PPM	38	73	30	101	71	55	102	77	70	55	96	51	44	69
HCl WT. %	0.13	0.03	0.04	0.01	0.03	0.06	1.44	0.03	0.03	0.02	0.02	0.02	0.01	0.15
Fe PPM	1.30	2.49	1.51	3.49	8.63	6.17	9.36	3.12	2.29	2.89	3.25	2.18	2.68	4.01
Cl ₂ PPM	2	(1	(1	1	(1	(1	1	(1	1	(1	(1	1	(1	1
BOTTOMS														
CHLOROF RM WT. %	(0.01	(0.01	0	0	0	0	0	0	0	0	0	0	0	(0.01
1,2-DICHLOROETHANE WT. %	73.47	61.92	66.22	86.11	86.88	85.18	82.07	86.74	82.85	82.15	69.36	91.87	87.34	80.72
Trichloroethylene Wt. %	(0.01	0	0	0	0	0	0	0	0	0	0	0	0	0
1,1,2-TRICHLOROETHANE WT. %	18.61	25.95	22.90	8.04	7.45	7.93	7.95	8.14	11.32	11.62	20.32	2.44	4.17	11.52
OTHERS WT. %	7.83	11.79	10.88	5.47	5.67	6.89	8.56	5.12	5.83	6.22	10.32	5.70	8.49	7.58
HCl WT. %	0.08	0.02	0.03	0.02	0.05	0.03	0.03	0.02	0.01	0.02	0.02	0.02	0.04	0.03
Fe PPM	39.76	97.38	109.28	87.55	99.02	136.82	73.43	71.55	58.74	77.89	49.41	51.20	51.85	80.34
WASTE-DOPP KETTLE BOTTOMS														
1,2-DICHLOROETHANE WT. %														
PERCHLOROETHYLENE WT. %														
1,1,2-TRICHLOROETHANE WT. %														
U-TETRACHLOROETHANE WT. %														
S-TETRACHLOROETHANE WT. %														
PENTACHLOROETHANE WT. %														
OTHERS WT. %														
Fe PPM														
TARS WT. %														
RESIDUE WT. %														

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CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

[illegible]

PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

[illegible]

PPG INDUSTRIES
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
LABORATORY OPERATIONS REPORT

[illegible]

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

[illegible]

PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

[illegible]

PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

[illegible]

SL 013396

		CONFIDENTIAL:	
	Subject to Protective Order		
of	14th Judicial District Court		
	No. 91-1145		

***Unless Otherwise Indicated**

PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

SL 013397

~~CONFIDENTIAL~~

Subject to Protective Order
of 14th Judicial District Court
No. 21-1145

•* Storage Tank Subsequent to Jan.

0.15

PPG INDUSTRIES
 CHEMICAL DIVISION
 LAKE CHARLES, LOUISIANA
 LABORATORY OPERATIONS REPORT

CONFIDENTIAL:
 Subject to Protective Order
 of 14th Judicial District Court
 No. 91-1145

INCINERATOR	1973 AVG.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1974 AVG.
WASTE GAS FEED Wt. %														
C ₂ H ₄			-	5.33	-	-	9.94	5.80	13.56	16.18	11.68	4.51	6.17	9.15
HCl			-	36.42	-	-	18.06	21.21	16.00	8.11	23.03	18.23	18.48	19.94
EC			-	0.71	-	-	0.81	0.33	1.45	1.66	0.51	0	0.33	0.83
VDC			-	2.12	-	-	2.11	1.46	1.13	1.82	1.92	2.71	1.23	1.81
EDC			-	2.01	-	-	2.01	1.14	2.65	2.88	2.28	0.46	2.32	1.97
Perchlor			-	0.13	-	-	0.12	0.06	0.07	0.10	0.17	0.18	0.43	0.16
Trichlor			-	1.04	-	-	1.03	2.24	1.36	1.14	1.28	2.28	0.71	1.26
Trans			-	1.88	-	-	1.86	1.97	1.42	1.92	2.04	3.07	1.26	1.93
Cis			-	1.14	-	-	1.34	1.57	1.08	1.24	1.39	2.08	0.58	1.30
Other			-	0.08	-	-	0.20	0.09	0.27	-	0.05	0.10	0.00	0.13
No. 1 INCINERATOR														
HCl in Stack PPM			320	-	116	121	144	195	164	159	151	183	101	165
Cl ₂ in Stack PPM			440	-	164	95	122	111	197	220	269	191	99	191
HCl in Effluent GPL			21.1	18.8	8.6	14.2	9.5	13.9	16.9	19.5	17.5	16.8	11.8	15.3
Stack HCB PPM			-		-	-	-	-	-	-	-	-	-	-
Aqueous HCB PPM			-		-	-	-	-	-	-	-	-	-	-
No. 2 INCINERATOR														
HCl in Stack PPM			147	168	164	109	155	220	161	167	166	154	94	155
Cl ₂ in Stack PPM			355	242	300	95	137	152	150	203	237	181	54	191
HCl in Effluent GPL			19.4	18.4	23.0	23.1	20.3	18.0	17.4	18.5	17.6	15.7	10.1	18.3
Stack HCB PPM			-	-	-	-	-	-	-	-	-	-	-	-
Aqueous HCB PPM			-	-	-	-	-	-	-	-	-	-	-	-
STACK GAS ANALYSES PPM														
CO			-	-	-	-	-	-	-	-	-	-	-	-
NOX			-	-	-	-	-	-	-	-	-	-	-	-
Organics			-	-	-	-	-	-	-	-	-	-	-	-
CH ₄			-	-	-	-	-	-	-	-	-	-	-	-
HCl			-	-	-	-	-	-	-	-	-	-	-	-
Cl			-	-	-	-	-	-	-	-	-	-	-	-
SL 013399														

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Subject to Protective Order
 of 14th Judicial District Court
 No. 91-1145

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

CONFIDENTIAL:

Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

SL 013400

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANACONFIDENTIAL
Subject to Protection Order
of 14th Judicial District Court
No. 91-1145

ETHYLENE DICHLORIDE DEPARTMENT OPERATIONS REPORT

GENERAL DEPARTMENT	1973 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG.
EDC STRIPPER NO. 1														
PRESSURE TOP PSIG	9.3	8.9	9.3	9.1	9.0	9.2	10.0	10.8	11.1	10.5	11.2	11.2	11.2	10.1
TEMP. °F BOTTOM	214	213	215	214	213	214	216	219	219	218	221	220	220	217
T P	209	199	201	206	206	209	210	211	213	213	214	214	216	209
FEED RATE GPM	67.2	42.9	64.9	57.6	54.8	71.6	77.3	47.7	46.3	44.8	55.4	50.0	58.9	56.0
EDC STRIPPER NO. 2														
PRESSURE TOP PSIG	11.4	11.8	11.2	13.0	11.8	13.7	3.9	16.2	16.4	15.3	11.8	11.7	11.3	13.2
TEMP. °F BOTTOM	217	220	218	222	221	224	222	227	226	224	217	216	216	221
T P	213	217	213	217	217	220	220	224	223	222	214	214	214	218
FEED RATE GPM	82.5	67.0	73.8	77.2	81.3	72.3	66.4	81.5	82.9	89.1	72.3	96.8	93.3	79.5
EDC STILL NO. 1														
FEED RATE GPM	44.7	32.5	52.0	-	-	-	-	-	-	-	-	27.0	40.4	38.0
REFLUX RATE GPM	24.3	25.0	25.2	-	-	-	-	-	-	-	-	21.8	24.7	24.2
PRODUCTION GPM	45.9	33.7	53.0	-	-	-	-	-	-	-	-	27.7	40.4	38.7
EDC STILL NO. 2														
TEMP. °F BOTTOM	255	248	242	245	243	247	253	250	256	257	259	261	263	252
TOP	195	194	201	202	204	203	210	204	194	196	194	199	195	200
FEED RATE GPM	101.6	65.2	129.4	130.2	130.4	132.2	131.6	132.5	130.9	134.5	122.7	133.7	107.7	123.4
REFLUX RATE GPM	77.3	79.6	100.4	105.4	111.1	114.3	114.6	105.5	109.5	116.9	100.7	122.8	124.1	108.7
PRODUCTION GPM	96.9	61.4	123.0	124.0	124.6	128.0	123.4	123.0	123.4	126.4	115.5	126.2	134.1	119.4
STEAM (140# BASIS) LBS./T EDC	772	831	-	310	194	583	658	636	839	974	887	935	914	706
KWH/T EDC	13.4	23.2	15.5	15.8	15.3	14.7	14.8	15.2	16.2	17.1	18.1	14.0	16.3	16.4
WELL WATER MGALS./T EDC	0.57	0.98	0.75	0.74	0.78	0.72	0.70	0.78	0.82	0.89	0.94	0.74	0.69	0.79
GAS MCF/T EDC	0.06	0.06	0.05	0.05	0.05	0.07	0.06	0.06	0.07	0.14	0.12	0.11	0.09	0.08
NITROGEN TONS/T EDC	0.005	0.008	0.006	0.005	0.005	0.005	0.006	0.005	0.005	0.006	0.006	0.005	0.006	0.006
OPERATING TIME (ANY RX) %	99.5	83.2	100.0	100.0	100.0	100.0	100.0	91.3	100.0	100.0	100.0	100.0	100.0	97.9

SL 013401

PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

ETHYLENE DICHLORIDE DEPARTMENT OPERATIONS REPORT

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* TOTALS
** OPERATIONS + MAINTENANCE

SL 013402

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

"TRI-ETHANE"® DEPARTMENT OPERATIONS REPORT

CONFIDENTIAL

Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

[illegible]

SL 013403

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

"TRI-ETHANE"® DEPARTMENT OPERATIONS REPORT

CONFIDENTIAL
Subject to Protective Order
of 14th Judicial District Court
No. 91-1045

SL 013404

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

TRI-ETHANE DEPARTMENT OPERATIONS REPORT

CONFIDENTIAL:

Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

MATERIAL BALANCE	1973 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG.
CARBON - TONS														
TOTAL CARBON IN FEED	1378.0	1433.4	1353.1	1532.4	1472.3	1546.8	1527.1	975.6	1407.0	1691.8	1630.0	1861.6	1970.6	1533.5
CARBON IN PRODUCTION	1295.3	1313.7	1248.9	1463.4	1392.2	1363.6	1386.1	886.0	1235.9	1496.0	1467.7	1592.0	1769.1	1384.6
CARBON LOSS IN PROCESS	82.7	119.7	104.2	69.0	80.1	183.2	141.0	89.6	171.1	195.8	162.3	269.6	201.5	148.9
ACCT. LOSS IN STILL BOTTOMS	8.9	0.0	0.0	0.0	0.0	0.0	0.0	27.7	0.0	0.0	0.0	6.0	0.0	2.8
MISC. ACCT. LOSSES														
UNACCOUNTABLE CARBON LOSS														
IN PROCESS	73.8	119.7	104.2	69.0	80.1	183.2	141.0	61.9	171.1	195.8	162.3	263.6	201.5	146.1
CARBON LOADING LOSS	25.3	49.0	15.1	28.0	26.1	3.7	36.4	69.5	16.6	2.0	43.6	24.1	46.8	27.3
TOTAL CARBON LOSS	108.0	168.7	119.3	97.0	106.2	186.9	177.4	159.1	154.5	197.8	205.9	293.7	248.3	176.2
CHLORINE - TONS														
TOTAL CHLORINE IN FEED	8532.6	8765.6	8296.9	9258.5	9054.0	9352.5	9462.1	6086.9	8579.0	10464.3	10203.6	11248.4	11187.9	9387.6
CHLORINE IN PRODUCTION	6260.9	6721.8	6182.5	7341.1	7003.4	6724.9	7113.1	4612.5	6385.0	7566.9	7336.8	7964.4	8315.0	6939.0
CHLORINE LOSS IN PROCESS	2271.7	2043.8	2114.4	1917.4	2050.6	2627.6	2349.0	1474.4	2194.0	2897.4	2866.8	3284.0	3564.1	2448.6
ACCT. LOSS IN STILL BOTTOMS	45.6	0.0	0.0	0.0	0.0	0.0	0	95.0	0.0	0.0	0.0	26.8	0.0	10.2
MISC. ACCT. LOSSES														
LOSS FROM VDC REACTION PLUS														
OTHER UNACCOUNTABLE LOSSES	1976.2	2043.8	2114.4	1917.4	2050.6	2627.6	2349.0	1379.4	2194.0	2897.4	2866.8	3257.2	3564.1	2438.4
CHLORINE LOADING LOSS	118.8	229.7	71.0	131.3	122.5	17.4	170.9	326.2	77.9	9.3	204.6	106.7	207.9	126.6
TOTAL CHLORINE LOSS	2390.5	2273.5	2185.4	2048.7	2173.1	2645.0	2519.9	1800.7	2116.1	2906.7	3071.4	3390.7	3772.0	2575.2
TCE REACTOR SYSTEM														
TEMP. BOTTOM OF	193	209	203	212	223	209	208	206	202	215	216	203	196	208
PRESS. TOP PSIG	50	50	48	49	52	51.1	48.9	47.9	48.1	50.1	48.0	49.1	50.0	49.4
EDC ABSORBER														
TEMP. CHILLED HCL OF	11	18	26	18	23	24	40	39	27	23	22	21	24	25
FEED FLOW GPM	12.0	25.8	10.5	9.6	10.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	9.5	12.4
LIGHTS STILL														
TEMP. BOTTOM OF	291	292	291	292	295	297	297	294	287	289	286	282	283	290
VAPOR OF	203	204	203	205	208	210	211	208	199	201	200	192	193	203
FEED FLOW GPM	99	100	100	100	100	99	104	101	103	119	116	110	115	106

PRG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

"TRI-ETHANE"® DEPARTMENT OPERATIONS REPORT

CONFIDENTIAL:

Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

[illegible]

SL 013406

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

SL 013407

PERCHLORETHYLENE - TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT

GENERAL DEPARTMENT		1973 AVG.	JAN	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1974 AVG.
Records Per Prod.	T/D	213.3	246.4	233.8	234.7	180.6	224.2	203.1	197.2	188.2	202.8	179.7	195.4	247.6	211.1
Shipments	T/D	208.9	190.9	285.8	263.9	264.1	244.2	172.8	228.8	153.6	259.6	98.9	246.4	196.5	217.1
Inventory	Tons	4732.3	7421.2	6016.2	5112.1	2610.3	1992.0	2896.4	1916.0	2985.9	1282.6	3791.8	2259.4	3841.7	3510.5
Rec rds Tri Prod.	T/D	264.6	313.6	260.8	270.1	228.3	298.7	250.7	260.2	217.8	281.7	180.2	239.8	245.9	254.0
Shipments	T/D	265.7	162.4	254.9	425.1	262.3	274.9	237.8	232.6	233.0	274.0	209.5	193.8	237.4	249.8
Inventory	Tons	3525.2	7190.3	7353.9	2545.5	1524.8	2263.1	2649.2	3506.6	3035.6	3268.4	2359.8	3741.1	4005.8	3620.3
Area Per Prod.	T/D	215.4	250.9	235.9	247.2	175.3	234.9	196.7	213.0	175.9	211.2	183.2	221.6	242.9	215.7
EDC	T/T														
Cl ₂	T/T	0.070	0.093	0.071	0.086	0.116	0.082	0.107	0.084	0.078	0.067	0.085	0.036	0.046	0.079
NH ₃	Lbs./T	6.4	8.2	7.2	3.3	9.5	9.0	8.9	8.2	8.2	7.6	7.4	9.2	6.9	7.8
Area Tri Prod.	T/D	265.9	316.3	261.4	265.4	239.6	301.9	258.4	253.5	239.4	255.4	209.1	248.4	249.1	258.2
EDC	T/T														
Cl ₂	T/T	0.044	0.058	0.045	0.054	0.073	0.052	0.068	0.053	0.049	0.042	0.054	0.022	0.029	0.050
NH ₃	Lbs./T	6.4	8.3	7.3	3.3	9.6	9.3	8.6	8.4	8.7	7.4	7.6	8.9	7.0	7.9
Total Area Prod. O ₂	T/T	0.160	0.149	0.163	0.155	0.165	0.169	0.197	0.167	0.190	0.161	0.184	0.150	0.184	0.170
N ₂	T/T	0.086	0.072	0.091	0.098	0.115	0.072	0.109	0.119	0.144	0.112	0.149	0.122	0.115	0.110
Catalyst	Lbs./T	2.87	2.09	3.04	1.73	3.76	1.63	4.21	3.11	3.10	4.02	7.21	5.09	5.21	3.68
400 # Stm.(actual) Lbs./T		4859	4548	4883	4561	5204	4374	5231	5286	5874	5041	5694	4819	4605	5010
KWH/T		56.3	62.0	68.8	69.0	85.4	64.3	82.5	81.5	99.8	83.5	94.9	74.3	83.9	79.2
Total Stillbottoms T/T		0.272	0.251	0.305	0.239	0.392	0.243	0.353	0.383	0.365	0.265	0.340	0.267	0.256	0.305
MAN HRS./T RECORDS PROD.															
Production		0.186	0.171	0.196	0.212	0.278	0.192	0.239	0.218	0.285	0.242	0.306	0.246	0.233	0.235
Maintenance		0.318	0.208	0.292	0.313	0.468	0.293	0.384	0.353	0.496	0.500	0.655	0.440	0.452	0.404
Salaried		0.060	0.052	0.060	0.056	0.074	0.055	0.062	0.064	0.071	0.060	0.079	0.056	0.060	0.062
Total		0.564	0.431	0.548	0.581	0.820	0.540	0.685	0.635	0.852	0.802	1.040	0.742	0.745	0.701
Contract Man Hrs. Included		0.003	0.000	0.000	0.047	0.004	0.000	0.013	0.062	0.003	0.018	0.000	0.000	0.032	0.015
MAN HRS./T SHIPPED															
Bulk		0.028	0.044	0.029	0.025	0.022	0.032	0.032	0.036	0.041	0.027	0.045	0.036	0.035	0.034
Drum		0.699	0.863	0.862	0.748	0.729	0.760	0.660	0.749	0.920	0.757	0.725	0.857	0.977	0.801
Salaried		0.005	0.008	0.005	0.003	0.004	0.005	0.005	0.006	0.007	0.004	0.007	0.005	0.006	0.005
TCE T/T PER AREA PROD.		0.919	0.938	0.877	0.871	0.850	0.897	0.814	0.919	0.943	0.842	0.906	0.845	0.938	0.887
TCE T/T TRI AREA PROD.		1.165	1.185	1.107	1.099	1.073	1.133	1.028	1.160	1.190	1.063	1.144	1.067	1.185	1.120

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PERCHLORETHYLENE - TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT

		CONFIDENTIAL:		
		Subject to Protective Order		
		of 14th Judicial District Court		
		No. 91-1145		

* Corrected Values

PPG INDUSTRIES
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PERCHLORETHYLENE-TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT

MATERIAL BALANCE	1973 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG.
CARBON - TONS														
TOTAL CARBON IN FEED	3444.8	4141.1	3347.2	3748.8	3374.0	3882.6	3660.8	3927.3	3503.0	3562.0	3251.4	3317.7	3752.2	3622.3
CARBON IN UNSTAB. PRODUCT	3059.9	3778.8	2996.4	3332.8	2921.3	3471.5	3140.4	3361.9	3046.7	3044.3	2702.6	2993.1	3238.0	3169.0
PROCESS LOSS BY DIFFERENCE	384.9	362.3	350.8	416.0	452.7	411.1	520.4	565.4	456.3	517.7	548.8	324.6	514.2	453.3
ACCOUNTABLE PROCESS LOSSES														
REACTOR	364.9	342.3	330.8	394.0	432.7	391.1	500.4	545.4	436.2	497.7	528.8	304.6	494.2	433.3
MISCELLANEOUS	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
SUB TOTAL	384.9	362.3	350.8	416.0	452.7	411.1	520.4	565.4	456.3	517.7	548.8	324.6	514.2	453.3
CARBON LOADING LOSS	16.6	26.1	22.6	28.2	20.7	-2.9	19.0	22.9	82.0	-50.3	22.3	170.6	10.3	30.9
TOTAL CARBON LOSSES	401.5	388.5	373.4	444.2	473.4	408.2	539.4	588.3	538.3	467.4	571.1	495.2	524.5	484.2
CHLORINE - TONS														
TOTAL CHLORINE IN FEED	22489.8	27621.1	21643.0	24272.4	21390.6	25528.2	22717.2	24815.3	21636.9	22017.9	20635.2	21081.3	23861.5	23101.7
CHLORINE IN UNSTAB. PRODUCT	19786.5	24433.7	18947.8	20568.4	17844.6	22019.9	19274.7	21035.0	18227.4	19033.9	17269.0	19660.3	21547.9	19988.6
PROCESS LOSS BY DIFFERENCE	2703.3	3187.4	2695.2	3704.0	3546.0	3508.3	3442.5	3780.3	3409.5	2984.0	3366.2	1421.0	2313.6	3113.1
ACCOUNTABLE PROCESS LOSSES														
REACTOR	2603.4	3087.3	2595.2	3604.0	3446.0	3408.3	3342.5	3680.3	3309.5	2884.0	3266.2	1321.0	2213.6	3013.2
MISCELLANEOUS	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
SUB TOTAL	2703.4	3187.4	2695.2	3704.0	3546.0	3508.3	3442.5	3780.3	3409.5	2984.0	3366.2	1421.0	2313.6	3113.2
CHLORINE LOADING LOSS	86.2	141.0	120.9	207.5	48.7	27.7	86.6	186.5	309.3	-259.2	135.8	921.5	26.2	162.7
TOTAL CHLORINE LOSS	2789.5	3328.3	2816.1	3911.5	3594.7	3536.0	3529.1	3966.8	3718.8	2724.8	3502.1	2342.5	2339.8	3275.8
CONFIDENTIAL: Subject to Protective Order of 14th Judicial District Court														

SL 013409

FORM NO. 210. 4. CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

PPG I STRIES
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

SL 013410

PERCHLORETHYLENE-TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT

REACTOR NO. 1	1973 Avg.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 Avg.
ON STREAM TIME *HRS.	8272	744	646	714	616	730	682	736	740	641	674	672	606	8201
TEMP. OF VAPORIZER LIQUOR	336	380	377	390	351	386	359	385	372	370	377	363	384	374
DOWTHERM OUT	460	450	455	569	552	578	500	468	470	447	522	503	515	502
SEC. COND. DISCH	33	32	27	30	34	50	35	36	41	39	40	27	24	34
CATALYST CHARGED * LBS.	111537	4698	4292	2389	12512	5082	13892	13784	5472	20823	29305	10026	14118	136393
CATALYST FROM CENTRIFIX * LBS.	111537	4698	4292	2389	12512	5082	13892	13784	5472	20823	29305	10026	14118	136393
FLOW GPM Organic	18.0	21.9	20.9	20.4	19.3	22.8	20.6	21.7	20.3	19.1	19.3	17.6	17.1	20.1
SCFH Cl ₂	1419	3100	3600	3300	3600	3100	3140	2780	1700	1700	1100	2500	1900	2626
O ₂	13100	13800	16200	12600	11400	13200	12500	14090	13400	12000	14600	14600	13000	13449
PER-TRI RATIO	0.92	0.85	1.04	1.15	1.15	0.98	0.94	0.89	1.02	0.93	1.60	1.43	1.49	1.12
PER I TRI IN CRUDE %	85.83	83.69	77.23	88.67	82.29	80.65	76.60	82.10	82.60	82.00	84.40	84.30	87.20	82.64
REACTOR NO. 2														
ON STREAM TIME * HRS.	7963	680	650	684	698	710	662	742	524	570	690	569	676	7855
TEMP. OF VAPORIZER LIQUOR	356	376	394	381	369	384	362	379	364	360	374	375	376	374
DOWTHERM OUT	526	520	485	537	607	580	520	604	571	541	609	576	519	556
SEC. COND. DISCH.	38	33	32	37	35	51	42	41	48	43	35	29	28	38
CATALYST CHARGED * LBS.	136569	10648	6392	9914	12862	6132	18092	10284	7572	6123	13905	16676	11468	130068
CATALYST FROM CENTRIFIX * LBS.	136569	10648	6392	9914	12862	6132	18092	10284	7572	6123	13905	16676	11468	130068
FLOW GPM Organic	17.0	19.4	19.0	16.8	15.6	17.7	18.5	16.5	13.4	15.2	16.9	15.9	14.4	16.6
SCFH Cl ₂	2501	4300	1800	3500	3600	3200	3571	2912	3000	2350	2000	2700	1900	2903
O ₂	15900	17100	20900	15900	12500	15500	16400	16480	14900	15100	15500	17100	18400	16315
PER-TRI RATIO	0.90	1.69	1.27	1.06	1.21	0.95	0.94	0.70	0.81	0.90	1.26	0.88	1.52	1.10
PER I TRI IN CRUDE %	87.79	81.80	90.22	86.95	80.61	80.01	78.90	84.10	86.80	86.00	80.00	80.10	89.00	83.71

*Totals

FORM NO. SA 210-5. CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

PPG INDUSTRIES
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

SL 013411

PERCHLORETHYLENE-TRICHLOROETHYLENE DEPARTMENT OPERATIONS REPORT

REACTOR NO. 3	1973 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG.
ON STREAM TIME * HRS.	8223	742	532	734	692	682	667	714	702	686	584	639	663	8037
TEMP. OF VAPORIZER LIQUOR	338	367	366	356	342	358	351	347	356	361	347	373	379	359
DORTHERM OUT	495	456	464	525	560	499	479	576	582	541	602	567	520	531
SEC. COND. DISCH.	31	25	24	28	29	49	32	34	31	32	30	23	27	30
CATALYST CHARGED LBS. *	88216	6448	11992	7289	9362	5082	13892	6434	6872	11198	7255	10026	20218	116068
CATALYST FROM CENTRIFUG LBS. *	88216	6448	11992	7289	9362	5082	13892	6434	6872	11198	7255	10026	20218	116068
FLOW GPM Organic	18.4	18.2	16.8	16.2	15.6	16.4	15.1	15.8	15.2	13.7	11.9	13.7	13.7	15.2
SCFH Cl ₂	1944	3000	3500	3700	3300	3400	3700	2200	2180	2270	2900	800	800	2646
O ₂	16400	16700	13500	16200	13900	16800	15000	16500	16400	16400	13000	19500	17500	16000
PER-TRI RATIO	0.94	0.87	1.03	1.48	1.16	1.05	1.17	0.90	1.02	1.30	1.02	1.00	0.96	1.08
PER I TRI IN CRAUDE %	85.89	85.25	81.78	91.49	86.19	85.38	77.40	87.6	86.2	86.9	85.4	86.0	86.4	85.5
REACTOR NO. 4														
ON STREAM TIME *HRS.	8325	726	616	744	692	734	690	672	715	720	655	634	670	8268
TEMP. OF VAPORIZER LIQUOR	352	354	362	361	328	358	338	348	350	362	349	362	370	354
DORTHERM OUT	490	451	475	585	588	508	536	517	541	521	603	562	485	531
SEC. COND. DISCH.	41	55	55	52	53	61	60	53	52	47	50	29	44	51
CATALYST CHARGED LBS. *	77320	10298	10942	4489	7262	5082	5142	10284	10372	6648	14955	17726	12868	116068
CATALYST FROM CENTRIFUG LBS. *	77320	10298	10942	4489	7262	5082	5142	10284	10372	6648	14955	17726	12868	116068
FLOW GPM Organic	18.0	19.5	18.7	18.6	15.7	19.4	18.4	16.6	16.8	17.0	14.3	15.4	18.4	17.4
SCFH Cl ₂	1952	2900	3200	3000	3600	2600	2760	2700	2400	1260	2500	1400	600	2400
O ₂	13700	16700	16400	16600	13600	18300	16100	14600	16800	16500	12600	13600	16700	15700
PER-TRI RATIO	1.01	1.00	1.15	1.22	1.26	1.44	1.41	1.05	1.02	1.13	0.86	1.18	1.14	1.16
PER I TRI IN CRAUDE %	88.37	86.10	87.81	91.56	89.88	90.95	87.00	89.0	86.9	87.7	85.0	87.8	89.3	88.19

*Totals

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

PERCHLORETHYLENE-TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT

SL 013412

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

*Totals

PERCHLORETHYLENE - TRICHLOROETHYLENE DEPARTMENT OPERATIONS REPORT

REFRIGERATED BRINE		1973	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974
		AVG.													AVG.
Temp. °F	#1 Warm (in)														
	#1 Cold (out)														
	#2 Warm (in)	6	5	5	4	4	25	5	6	4	1	4	(1	(0	5
	#2 Cold (out)	2	-4	-5	3	-6	21	-3	-3	-3	-4	-4	-6	-5	-2
PER STILL #1															
Feed	GPM	7.6	7.9	8.4	9.0	7.5	8.6	8.5	7.1	7.2	8.0	9.8	7.8	8.9	8.2
Reflux	GPM	13.7	13.3	14.3	14.1	13.7	14.0	14.1	14.2	14.7	10.5	11.2	15.0	14.6	13.6
Recycle	GPM	0.21	(0.1	0.4	0.1	0.5	0.6	0.7	0.4	0.6	0.8	0.7	1.0	0.5	0.5
Pot Temp	°F	287	288	289	290	285	285	285	288	293	291	284	283	280	287
Overhead Temp	°F	257	258	262	264	246	248	246	247	251	243	242	238	245	249
PER STILL #2															
Feed	GPM	16.2	19.3	18.0	19.6	14.6	17.3	18.0	18.2	17.7	20.3	20.1	19.6	22.0	18.7
Reflux	GPM	24.8	22.7	23.5	19.6	18.6	16.5	17.9	17.9	18.4	18.7	17.8	18.6	17.4	19.0
Recycle	GPM	1.5	1.8	2.9	3.8	3.0	3.9	4.5	3.9	4.3	5.6	5.2	5.1	4.7	4.1
Pot Temp	°F	293	294	296	294	290	283	290	290	292	302	301	299	294	294
Overhead Temp	°F	248	253	260	261	252	255	251	252	254	253	246	252	251	253
TRI STILL #1															
Feed	GPM	14.8	17.5	17.0	14.8	13.6	16.5	15.5	17.0	16.8	51.5	14.6	15.6	15.1	15.8
Reflux	GPM	66.0	63.7	62.6	54.3	53.2	52.2	56.8	55.0	61.4	58.6	54.3	56.2	57.5	58.0
Recycle	GPM	2.76	3.4	4.4	3.1	3.1	4.2	3.9	4.6	4.4	3.2	2.8	2.8	2.6	3.5
Bottoms	GPM	17.1	18.2	15.3	14.9	13.1	15.6	13.8	15.8	16.5	15.1	13.8	14.2	14.8	15.1
Pot Temp	°F	234	233	233	229	230	229	232	230	231	229	228	227	228	229
Overhead Temp	°F	160	158	160	170	166	172	169	172	173	166	162	162	163	166
TRI STILL #2															
Feed	GPM	23.2	28.4	26.5	24.0	22.8	29.0	27.3	28.6	28.1	25.6	24.3	25.2	26.1	26.3
Reflux	GPM	101.2	98.8	93.9	82.5	82.9	84.3	92.9	95.2	100.2	100.4	93.9	87.6	95.6	92.3
Recycle	GPM	4.7	5.6	7.0	5.0	5.1	6.2	6.3	6.7	6.0	6.1	4.7	5.0	4.5	5.7
Bottoms	GPM	18.2	23.0	18.7	18.6	18.6	23.6	21.0	21.2	22.4	20.1	20.6	19.5	20.6	20.7
Pot Temp	°F	226	237	236	234	235	235	237	234	236	237	235	227	234	235
Overhead Temp	°F	147	147	154	162	158	159	157	162	163	162	158	160	160	158
DH STILL #1															
Temp. °F	Pot	181	179	180	184	182	185	181	187	185	185	184	177	182	183
	Overhead	148	144	141	147	142	147	142	150	151	148	148	143	143	146
Pot Pressure	PSIG	1.70	1.68	1.68	1.70	1.66	1.68	1.70	1.68	1.78	1.66	1.48	1.52	1.49	1.64

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PERCHLORETHYLENE - TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT

[illegible]

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LAKE CHARLES, LOUISIANA

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

SL 013416

HYDROGEN CHLORIDE DEPARTMENT OPERATIONS REPORT

GENERAL DEPARTMENT	1973 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG.
PRESSURE														
Comp. Disch. PSIG														
Comp. Suction "H ₂ O														
TEMPERATURE °F														
No. 1 Burner														
Gas from Primary														
Gas from Secondary														
No. 2 Burner														
Gas from Primary														
Gas from Secondary														
No. 5 Burner														
Gas from Primary														
Gas from Secondary														
No. 5 Comp. Disch. °F														
Cell Liquor #/Ton HCl														
Well Water to HCl GPM														
OPERATING TIME *														
No. 1 Burner														
No. 2 Burner														
No. 5 Burner														
COMPRESSORS #1	* 6741	59	345	632	338	684	146	475	707	488	358	595	594	5421
#2	* 7669	730	76	497	469	308	683	744	634	720	744	315	214	6134
#3	* 3180	664	345	333	452	438	578	231	0	232	352	305	588	4518
#4	* 7188	35	0	363	108	0	0	0	0	0	0	0	0	506
#5	* 2543	0	0	0	0	0	0	0	0	0	57	659	744	1460
#6	* 7826	35	0	0	0	0	370	15	0	0	121	0	0	541
#7	* 7895	709	626	689	628	744	356	654	597	696	579	487	744	7509
#8	*													
No. 1 Stripper	* 7404	35	0	375	145	0	0	0	0	0	0	0	0	555
No. 2 Stripper	* 6927	0	0	0	0	0	0	0	0	0	0	0	0	0

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-2145

*Totals

PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

HYDROGEN CHLORIDE DEPARTMENT OPERATIONS REPORT

[illegible]

SL 013417

	CONFIDENTIAL:	
	Subject to Protective Order	
	of 14th Judicial District Court	
	No. 91-1145	

PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

HYDROGEN CHLORIDE DEPARTMENT OPERATIONS REPORT

GENERAL DEPARTMENT	1973 AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG
62B WET. HCL														
REFRIGERATION UNIT														
PRESSURE PSIG														
SUCTION	20.5	-18.6	-	21.2	-21.6	-	-	-	-	-	-23.0	-21.8	-22.0	-21.4
DISCHARGE	11.4	8.4	-	10.0	8.8	-	-	-	-	-	8.8	8.2	8.5	8.8
SEAL	30.1	30.0	-	30.0	30.0	-	-	-	-	-	29.9	30.5	30.3	30.1
TEMPERATURES °F														
BRINE IN	32	38	-	28	25	-	-	-	-	-	19	28	31	28
BRINE OUT	33	38	-	25	21	-	-	-	-	-	15	24	27	25
AMPS	158	144	-	153	143	-	-	-	-	-	146	144	145	146
NO. 1 STRIPPER														
FLOWS														
STRONG ACID FEED GPM	46.8	43.8	-	38.0	36.3	-	-	-	-	-	-	-	-	39.4
STEAM LBS/HR	8881	9131	-	6674	6469	-	-	-	-	-	-	-	-	7425
TEMPERATURES °F														
TOP	230	226	-	226	230	-	-	-	-	-	-	-	-	227
Gas from Cooler	44	40	-	42	38	-	-	-	-	-	-	-	-	40
NO. 2 STRIPPER														
FLOWS														
STRONG ACID FEED GPM	43.4	0												
STEAM LBS/HR	6793	0												
TEMPERATURES °F														
TOP	244	-												
Gas from Cooler	44	-												
MAN HOURS/TON HCL														
PRODUCTION	0.135	0.346	0.365	0.242	0.314	0.291	0.690	0.372	0.519	1.990	3.233	0.917	1.079	0.863
MAINTENANCE	0.090	0.016	0.069	0.289	0.038	0.066	0.022	0.191	0.190	1.272	0.756	0.219	0.406	0.294
SALARIED	0.034	0.087	0.092	0.060	0.078	0.072	0.165	0.105	0.193	0.610	1.266	0.285	0.384	0.283
TOTAL	0.259	0.449	0.526	0.591	0.430	0.429	0.877	0.668	0.902	3.872	5.255	1.421	1.869	1.440
CONTRACT MAINT. INCLUDED IN ABOVE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

CONFIDENTIAL:
 Subject to Protective Order
 of 14th Judicial District Court
 No. 91-1145

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PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

ETHYL CHLORIDE DEPARTMENT OPERATIONS REPORT

CONFIDENTIAL

Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

GENERAL DEPARTMENT	1973 AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG
ETHYL CHLORIDE PRODUCTION T/D	168.2	175.4	89.7	148.4	141.2	172.3	183.8	165.7	139.1	160.0	152.3	140.7	183.5	154.3
EC AREA PRODUCTION T/D	168.6	175.7	80.6	148.3	142.0	172.7	184.5	167.1	144.8	154.7	152.1	140.9	183.6	153.9
EC SHIPMENTS T/D	169.3	139.7	136.4	123.8	153.0	176.4	158.7	152.4	171.0	157.5	174.0	120.5	170.3	152.8
HCL TO EC T/D	105.2	110.9	50.9	92.5	87.8	112.5	114.2	104.7	84.9	93.8	98.2	91.8	114.6	96.4
ETHYLENE TO EC T/D	76.0	79.0	36.3	67.0	64.3	79.8	85.0	79.2	69.5	73.0	73.0	66.3	84.7	71.4
PURITY %	99.92	99.87	99.92	99.91	99.94	99.97	99.95	99.93	99.95	99.91	99.86	99.94	99.88	99.92
HCL EFFICIENCY %	91.0	89.8	90.1	90.9	91.8	87.4	91.8	90.0	96.8	93.6	88.0	87.4	91.1	90.7
CARRON EFFICIENCY %	96.8	97.0	97.0	96.5	96.2	94.6	94.7	91.3	90.9	92.4	91.0	92.8	94.6	94.1
EXCESS HCL T/D	6.5	8.3	3.7	5.4	4.1	8.7	3.6	1.7	-5.4	-1.1	3.4	5.6	4.4	3.5
EXCESS HCL %	6.6	8.1	12.0	6.2	4.9	8.4	3.3	1.6	-6.0	-1.2	3.6	6.4	4.0	4.3
HCL TO EC TONS/TON EC PROD	0.624	0.631	0.632	0.623	0.617	0.651	0.619	0.631	0.586	0.606	0.645	0.651	0.623	0.626
C ₂ H ₄ TO EC TONS/TON EC	0.450	0.449	0.450	0.451	0.452	0.462	0.461	0.478	0.479	0.472	0.479	0.470	0.461	0.464
N ₂ TO EC TONS/TON EC	0.040	0.052	0.157	0.058	0.055	0.042	0.039	0.046	0.073	0.067	0.069	0.064	0.045	0.064
FCCL ₃ LBS/TON EC	8.4	9.5	8.8	7.7	9.9	7.9	9.3	9.8	10.2	9.6	11.1	9.8	7.2	9.2
STEAM LBS/TON EC	1102	1120	1182	1182	1139	1074	1052	1242	1116	1622	1703	1728	1567	1311
WELL WATER M GALS/TON EC	1.529	1.358	1.816	1.957	2.041	1.680	1.553	1.616	1.692	1.723	1.759	1.702	1.457	1.696
KWH/TON EC	93.0	79.2	95.3	95.9	90.6	70.1	72.6	81.2	88.1	87.0	95.5	89.2	90.3	86.2
MAN HOURS/TON EC														
PRODUCTION	0.212	0.238	0.508	0.266	0.300	0.244	0.226	0.188	0.199	0.195	0.180	0.196	0.146	0.240
MAINTENANCE	0.197	0.154	0.841	0.151	0.221	0.134	0.096	0.115	0.316	0.183	0.132	0.167	0.069	0.215
SALARIED	0.076	0.074	0.163	0.084	0.095	0.076	0.066	0.079	0.090	0.079	0.090	0.083	0.071	0.088
TOTAL	0.485	0.466	1.512	0.501	0.616	0.454	0.388	0.382	0.605	0.457	0.402	0.446	0.286	0.543
CONTRACT MAINT. INCLUDED IN ABOVE	0.035	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.020	0.000	0.000	0.000	0.002
Man Hours/T EC Shipped														
Bulk	0.025	0.030	0.025	0.034	0.025	0.027	0.051	0.041	0.025	0.038	0.020	0.030	0.022	0.031
Salaried	0.002	0.003	0.002	0.003	0.002	0.002	0.004	0.004	0.003	0.004	0.002	0.002	0.002	0.003

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

ETHYL CHLORIDE DEPARTMENT OPERATIONS REPORT

MATERIAL BALANCE	1973 AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1974 AVG
CHLORINE — TONS														
TOTAL CHLORINE IN FEED	3112.0	3343.2	1386.6	2788.7	2560.3	3390.3	3331.5	3155.3	2560.2	2737.0	2961.2	2676.9	3453.1	2862.0
CHLORINE IN PRODUCTION + <i>Losses</i>	2832.8	3003.6	1249.2	2535.9	2350.0	2964.9	3058.5	2839.4	2479.2	2563.3	2605.0	2340.4	3144.5	2594.5
CHLORINE LOSS IN PROCESS	279.2	339.6	137.4	252.8	210.3	425.4	273.0	315.9	81.0	173.7	356.2	336.5	308.6	267.5
BLOWDOWN FROM HEAVIES STILL	15.3	11.4	8.9	9.6	8.7	22.9	17.8	17.6	12.6	12.9	13.9	17.0	15.9	14.1
UNACCOUNTABLE PROCESS LOSS	263.9	328.2	128.6	243.2	201.6	402.5	255.2	298.3	68.4	160.8	342.3	139.5	292.7	253.4
CHLORINE LOADING LOSS	7.2	5.1	5.6	-0.6	13.4	7.2	10.7	-24.9	93.9	-73.5	-3.6	3.9	3.0	3.3
TOTAL CHLORINE LOSS	286.4	344.7	143.1	252.2	223.7	432.6	283.7	291.0	174.9	100.2	352.6	340.4	311.6	270.8
CARBON — TONS														
TOTAL CARBON IN FEED	1979.0	2095.8	870.7	1778.3	1653.0	2118.9	2184.9	2102.9	1844.3	1876.2	1937.4	1704.1	2249.1	1868.0
CARBON IN PRODUCTION + <i>Losses</i>	1916.4	2032.9	844.6	1716.4	1590.6	2004.2	2068.7	1920.3	1677.3	1734.2	1762.2	1582.2	2127.2	1755.1
CARBON LOSS IN PROCESS	62.6	62.9	26.1	61.9	62.4	114.7	116.2	182.6	167.0	142.0	175.2	121.9	121.9	112.9
BLOWDOWN FROM HEAVIES STILL	7.1	5.3	4.1	4.4	4.0	10.6	8.2	8.1	5.8	6.0	6.4	7.8	7.3	6.5
UNACCOUNTABLE PROCESS LOSS	55.5	57.6	22.0	57.5	58.3	104.1	108.0	174.5	161.2	136.0	168.7	114.0	114.6	106.4
CARBON LOADING LOSS	4.9	3.5	3.8	-0.4	9.0	4.9	7.2	-16.8	63.6	-52.5	-2.5	2.6	2.0	2.0
TOTAL CARBON LOSS	67.5	66.4	29.9	61.5	71.4	119.6	123.4	165.8	230.6	89.5	172.7	124.6	123.9	114.9
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Subject to Protective Order														
of 14th Judicial District Court														
No. 91-1145														

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PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

ETHYL CHLORIDE DEPARTMENT OPERATIONS REPORT

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Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

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PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

VINYL CHLORIDE DEPARTMENT OPERATIONS REPORT

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of 14th Judicial District Court
No. 91-1145

PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

VINYL CHLORIDE DEPARTMENT OPERATIONS REPORT

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Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

VINYL CHLORIDE DEPARTMENT OPERATIONS REPORT

[illegible]

SL 013424

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Subject to Protective Order		
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	No. 91-1145	

	CONFIDENTIAL:	
	Subject to Protective Order	
	of 14th Judicial District Court	
	No. 91-1145	

VINYL CHLORIDE DEPARTMENT OPERATIONS REPORT

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PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

OHC-EDC DEPARTMENT OPERATIONS REPORT

CONFIDENTIAL:

Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

GENERAL DEPARTMENT		1973 Avg.	JAN	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1974 Avg.
OHC-EDC Production	T/D	262.1	294.5	210.3	274.1	293.9	412.9	465.4	357.8	390.8	438.6	366.0	362.0	436.0	358.5
HCL to OHC-EDC	T/D	197.6	224.6	157.2	205.9	227.7	312.5	351.3	275.3	303.9	338.3	283.3	279.9	331.7	274.3
HCL Consumed	T/T EDC	0.754	0.762	0.747	0.751	0.756	0.756	0.754	0.769	0.777	0.771	0.774	0.773	0.760	0.763
Purchased C ₂ H ₄ to OHC-EDC	T/D	75.6	85.4	61.6	80.7	87.7	120.3	142.4	104.4	117.8	127.1	107.0	104.0	125.3	105.3
% C ₂ H ₄ Purity		99.92	99.87	99.92	99.91	99.94	99.97	99.95	99.93	99.95	99.91	99.86	99.94	99.88	99.92
YIELD	%														
Cl ₂ Basis		97.8	96.6	98.6	98.1	98.2	97.4	97.6	95.7	94.7	95.5	95.2	95.3	96.9	96.6
C ₂ H ₄ Basis		98.2	92.5	91.8	92.5	95.0	94.2	90.7	94.0	91.7	95.3	94.5	95.3	95.4	93.6
Excess C ₂ H ₄	%	1.9	2.4	3.4	3.9	2.8	2.8	8.0	2.9	6.3	2.2	3.2	1.4	1.4	3.4
Excess C ₂ H ₄	T/M	41.2	60.9	56.2	93.5	70.6	102.4	315.1	92.6	217.4	82.2	101.3	42.7	53.4	107.4
Excess C ₂ H ₄	Lbs/T EDC	10.7	13.3	19.1	22.0	15.6	16.0	45.1	16.7	35.9	12.5	17.9	7.8	7.9	19.2
Oxygen to OHC-EDC	T/D	50.1	57.5	39.5	52.4	55.1	75.8	85.1	75.8	79.4	74.7	72.7	69.9	81.1	68.3
Oxygen to OHC-EDC	T/T EDC	0.191	0.195	0.187	0.191	0.183	0.183	0.182	0.211	0.203	0.170	0.198	0.193	0.186	0.190
Excess O ₂	%	15.6	16.7	12.6	15.9	10.4	10.5	10.4	25.4	19.1	0.7	17.0	13.8	11.5	13.7
Excess O ₂	T/M	205.4	255.3	124.0	222.8	155.3	223.4	241.6	476.4	395.5	15.2	327.3	254.4	258.8	245.8
Excess O ₂	Lbs/T EDC	51.8	57.8	42.1	52.4	34.4	34.9	34.6	86.8	65.3	2.3	57.7	46.9	38.3	46.1
CRUDE EDC INVENTORY	TONS	228.4	240.6	531.8	407.4	679.3	361.9	457.5	571.3	410.7	420.5	400.9	474.7	240.3	433.1
For Per-Tri Feed	TONS	46.7	89.7	200.8	27.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.5
For EDC Still No. 2 Feed	TONS	183.7	150.9	331.0	40.3	381.9	52.3	62.4	24.4	13.8	54.9	54.9	36.8	0.0	100.3
For Tetra Feed	Tons	-	-	-	340.1	297.4	309.6	395.1	546.9	396.9	365.6	346.0	437.9	240.3	306.3
Transferred to Per-Tri	TONS					499.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.6
Transferred to EDC Still No. 2	TONS	82.7	0.0	0.0	588.4	2231.5	2463.3	4064.2	1788.6	4027.2	4888.8	3498.8	5403.7	4479.1	2786.1
Transferred to Tetra	TONS	7854.0	8863.9	5309.2	8327.8	5786.5	10632.9	9782.6	9100.3	8242.1	8180.6	7786.2	5329.5	9252.2	8049.5
MAN HOURS/TON EDC PRODUCED															
Production		0.177	0.199	0.334	0.205	0.199	0.144	0.108	0.152	0.134	0.114	0.144	0.152	0.121	0.167
Maintenance		0.250	0.105	0.404	0.207	0.236	0.135	0.135	0.261	0.216	0.160	0.266	0.240	0.248	0.218
Salaried		0.086	0.077	0.109	0.079	0.078	0.055	0.046	0.063	0.058	0.049	0.065	0.056	0.052	0.065
Total		0.513	0.381	0.847	0.491	0.513	0.334	0.289	0.476	0.408	0.323	0.475	0.448	0.421	0.450
Contract Man Hours Included		0.001	0.000	0.000	0.000	0.022	0.000	0.000	0.043	0.010	0.000	0.000	0.000	0.020	0.008

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Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

SL 013428

OXYHYDROCHLORINATION OPERATIONS

OHC-EDC REACTOR #1		1973 AVG.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1974 AVG.
On-Stream Time *	Hrs.	5249	688	522	384	532	696	676	296	404	682	704	668	288	6540
Top Pressure	psig	23	25	20	24	21	22	21	21	20	16	13	16	15	20
Dowtherm Temp. (From)	°F	346	348	367	342	-	-	-	348	366	480	398	388	397	382
(Into)	°F	313	303	335	314	-	-	-	314	337	351	372	362	374	340
Reactor Temp.															
Catalyst Bottom	°F	596	589	586	590	617	624	580	563	591	577	583	586	580	589
Middle	°F	539	543	529	539	534	535	526	546	538	542	534	541	539	537
Top	°F	521	526	513	514	504	510	514	516	511	-	519	525	521	516
Vapor Space	°F	520	526	513	512	505	511	518	528	515	525	521	526	523	519
Refrig. Cond. Outlet	°F	55	43	43	48	-	-	-	63	61	41	56	44	60	51
FEEDS C ₂ H ₄	schf	47384	48400	41500	47100	43100	41900	40600	38200	34800	33700	29600	31700	31400	38500
O ₂	schf	27546	29200	24700	28700	25200	25300	24700	27600	23800	23300	20400	23500	22700	24900
HCl	schf	97390	101700	88600	100600	85700	88600	89000	95800	86100	83700	70400	78700	76100	87100
RECYCLE ANALYSIS (Vol. %)															
CO ₂	%	28.6	32.8	30.9	31.5	27.2	27.7	32.6	35.2	32.8	30.3	43.3	38.5	40.7	33.6
C ₂ H ₄	%	54.2	51.2	51.7	51.4	48.0	47.5	50.0	39.1	40.0	50.5	38.7	47.1	48.2	47.0
O ₂	%	2.7	1.8	2.0	2.0	1.6	1.6	2.0	2.9	2.7	3.0	2.8	2.7	3.1	2.4
Catalyst Charged	Lbs.	10725	11669	0	17522	106	15839	15891	4268	7493	6348	22110	18910	3260	7714
REACTOR #2															
On-Stream Time *	Hrs.	5269	736	512	708	72	0	676	604	648	608	464	536	690	6254
Top Pressure	psig	23	24	19	19	14	-	21	20	12	16	15	13	18	17
Dowtherm Temp. (From)	°F	352	356	364	377	-	-	-	326	383	379	381	396	375	371
(Into)	°F	315	316	117	346	-	-	-	302	356	350	352	366	339	340
Reactor Temp.															
Catalyst Bottom	°F	580	571	596	576	596	-	580	593	598	580	594	589	586	587
Middle	°F	529	534	525	521	520	-	526	522	529	533	532	532	545	529
Top	°F	518	527	509	508	505	-	514	507	511	510	518	520	533	518
Vapor Space	°F	520	528	513	513	509	-	518	511	512	513	520	522	535	518
Refrig. Cond. Outlet	°F	55	43	45	45	-	-	-	65	62	43	52	45	49	50
FEEDS C ₂ H ₄	schf	47249	46500	41700	38400	32300	-	40600	38600	31100	34700	34900	33800	40200	37500
O ₂	schf	25808	26400	23100	22300	19400	-	24700	23600	18300	21000	20300	20100	25000	22200
HCl	schf	99500	97700	87200	84000	72800	-	89000	86900	65300	79000	72500	70700	82500	80700
RECYCLE ANALYSIS (Vol. %)															
CO ₂	%	29.5	31.9	28.8	35.7	35.7	-	32.6	39.8	41.0	43.3	40.9	40.4	43.5	37.6
C ₂ H ₄	%	54.5	53.5	53.3	52.7	52.7	-	50.0	42.4	43.7	43.3	46.9	46.0	38.4	47.5
O ₂	%	2.8	2.3	2.2	3.2	3.1	-	2.0	2.0	2.4	3.1	2.8	2.7	2.3	2.6
Catalyst Charged	Lbs.	10907	12641	0	32308	14	-	15891	8537	7493	5660	4950	8680	5580	9250

Totals*

PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

OXYHYDROCHLORINATION OPERATIONS

CONFIDENTIAL
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

SL 013429

Total test

PPG INDUSTRIES
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
OXYHYDROCHLORINATION OPERATIONS

[illegible]

SL 013431

PPG INDUSTRIES
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

WASTE RECOVERY DEPARTMENT OPERATIONS REPORT

* Corrected Values

PPG INDUSTRIES
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA
INCINERATOR OPERATIONS REPORT

GENERAL DEPARTMENT		AVG.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1771 AVG.
VENT FLOWS MCF/Day															
No. 1 EDC				41.5	45.9	31.7	129.3	170.1	25.9	15.4	0.0	0.0	0.0	4.2	42.2
No. 2 EDC				196.2	178.2	172.2	175.7	197.0	153.3	241.0	167.0	236.7	212.2	221.8	195.6
P/T				1191.4	1455.0	1418.5	1256.8	1496.3	1257.3	1335.5	1336.5	1178.4	1058.4	1260.1	1294.9
OHC				188.5	191.0	241.6	321.0	395.1	288.5	416.8	451.2	307.8	279.2	357.1	312.5
LIQUID FLOWS Cl LBS./Day															
EDC				-	-	-	-	-	-	-	-	-	-	-	-
Waste Recovery				-	-	64689	53356	84064	68607	79738	91144	66673	75324	97751	75705
MC				-	-	-	-	-	-	-	-	-	-	-	-
EC				-	-	-	-	-	-	-	-	-	-	-	-
VC				-	-	-	-	-	-	-	-	-	-	-	-
NO. 1 INCINERATOR															
Waste Gas MCF/Day				194.2	922.0	0.0	772.9	18.0	75.2	0.0	0.0	0.0	584.9	1160.8	338.9
Natural Gas MCF/Day				235.1	213.0	266.9	266.0	317.0	229.8	323.0	223.0	247.1	224.7	184.1	248.2
Lake Water GPM				702.9	685.4	574.9	646.8	433.1	453.0	481.2	402.8	501.4	423.6	377.1	516.6
Temperature °F				2045	2199	2500	2461	2457	2508	2470	2576	2507	2490	2468	2426
Operating Hours*											736	653	673	-	
HCl in Aqueous Sol. Tons					1083	594	1058	695	1050	1184	1365	1041	1162	801	1003
NO. 2 INCINERATOR															
Waste Gas MCF/Day				1832.9	2090.7	2149.0	1308.4	2407.7	1985.6	2316.7	23194	1886.3	1160.0	960.4	1856.1
Natural Gas MCF/Day				178.8	225.4	189.2	131.6	192.3	229.9	225.9	221.0	229.0	215.6	315.6	214.0
Lake Water GPM				669.7	695.3	601.6	543.0	516.8	411.9	511.8	525.7	700.1	453.5	395.1	547.7
Temperature °F				2469	2431	2518	2388	2500	2465	2490	2549	2509	2427	2458	2473
Operating Hours*											-	734	570	744	-
HCl in Aqueous Sol. Tons				2186	1763	2240	1270	1827	1296	1545	1750	1654	1080	704	1574
SL 013433															

CONFIDENTIAL:
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***Totals**