

LAKE CHARLES, LOUISIANA

PAGE 200-4

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

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PAGE 201-4

LABORATORY PRODUCT REPORT

EDC SHIPMENTS		1974 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975 AVG.
TRANS 1,2, DICHLOROETHYLENE PPM		0	8	4	(1	12	(1	0	0	0	0	0	0	1	2
1,1 DICHLOROETHANE PPM		17	17	8	14	12	16	19	18	17	16	20	12	11	15
IS 1,2 DICHLOROETHYLENE PPM		7	17	25	10	2	8	1	1	0	3	6	13	2	7
CHLOROFORM PPM		33	67	69	47	39	46	24	0	0	0	21	32	17	30
ETHYLENE DICHLORIDE %		99.984	99.981	99.981	99.973	99.977	99.975	99.982	99.980	99.984	99.990	99.992	99.983	99.990	99.982
TRICHLOROETHYLENE PPM		7	20	30	88	70	67	63	55	112	44	2	33	2	49
PERCHLOROETHYLENE PPM		10	16	3	15	12	4	0	8	0	0	0	0	0	5
1,1,2 TRICHLOROETHANE PPM		27	31	17	51	26	25	41	66	0	24	18	92	74	39
ETHYLENE CHLOROBROMIDE PPM		7	6	24	6	2	20	0	22	0	6	0	9	1	8
ETHYL CHLORIDE PPM		30	11	7	14	19	6	12	21	31	21	4	3	10	13
COLOR (APHA)		7	8	6	8	7	8	7	6	6	9	9	5	8	7
APPEARANCE		CLEAR	CLEAR	CLEAR	Clear	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR	CLEAR
ACIDITY PPM		(1	(1	0.34	0.59	1.02	0.78	0.93	0.90	1.50	3.67	1.00	1.00	1.00	1.10
WATER PPM		48	49	49	38	47	20	48	37	17	58	28	22	32	37
NON-VOLATILES PPM		1	(1	(1	3	1	1	3	3	-	(1	1	13	13	4
TOTAL IRON PPM		0.24	0.30	0.24	0.26	0.32	0.22	0.31	0.24	0.42	0.47	0.52	0.30	0.40	0.33
SPECIFIC GRAVITY 60°/60°F		1.262	1.262	1.260	1.261	1.261	1.259	1.262	1.263	1.259	1.259	1.262	1.263	1.263	1.261
SL 013436		CONFIDENTIAL: Subject to Protective Order of 14th Judicial District Court No. 91-1145													

LABORATORY PRODUCT REPORT

[illegible]

Subject to Protective Order
of 14th Judicial District Court
No. 9J-1145

LABORATORY DIVISION
LAKE CHARLES, LOUISIANA

PAGE 201-7

SL 013439

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY PRODUCT REPORT

PERCHLOR SHIPMENTS	1974	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975
TYPE 207														
COLOR APHA	11	11	8	11	11	9	12	8	7	8	13	8	10	10
SPECIFIC GRAVITY 20/20 °C														
DISTILLATION RANGE °C														
LOW														
HIGH														
WATER CONTENT CLOUD POINT °C	(0	(0	(0	(-10	(0	(0	(0	(0	(0	(0	(0	(10	(0	(0
NON-VOLATILE wt.%														
PH	8.3	8.6	8.5	8.4	8.4	8.5	8.5	8.6	8.5	8.4	8.4	8.4	8.4	8.5
ACID ACCEPTANCE % AS NaOH														
COPPER CORROSION														
ACIDITY ML OF 0.01 N NaOH														
FLASK MG/30 CM²														
SOXHLET MG/30 CM²														
CONDENSER MG/30 CM²														
CHLORIDES PPM														
TYPE 208														
COLOR APHA	10	9	8	9	8	8	10	7	7	7	10	7	8	8
SPECIFIC GRAVITY 20/20 °C	1.625	1.625	-	1.623	1.623	1.618	1.614	1.615	-	1.623	1.625	1.625	1.624	1.622
DISTILLATION RANGE °C														
LOW	120.8	120.9	-	121.0	121.0	121.1	121.1	121.0	-	121.0	121.3	121.0	121.1	121.1
HIGH	121.7	121.7	-	121.9	121.9	122.0	121.9	121.9	-	121.8	121.8	121.9	121.9	121.9
WATER CONTENT CLOUD POINT °C	(0	(0	(-10	(0	(0	(0	(0	(0	(-10	(0	(0	(0	(0	(0
NON-VOLATILE wt.%	.0003	.0004	-	.0003	.0004	.0001	.0003	.0008	-	.0002	.0007	.0001	.0004	.0003
PH	6.6	6.6	6.6	6.6	6.5	6.6	6.6	6.9	6.9	6.7	6.4	6.8	6.6	6.7
COPPER CORROSION														
ACIDITY ML OF 0.01 N NaOH	2	2	-	3	3	2	3	6	-	3	2	1	2	3
FLASK MG/30 CM²	1	1	-	3	2	2	3	2	-	3	4	4	1	3
SOXHLET MG/30 CM²	7	6	-	8	6	5	9	1	-	7	12	6	6	7
CONDENSER MG/30 CM²	8	8	-	11	8	12	10	12	-	7	7	4	7	9
CHLORIDES PPM	0.09	0.09	-	0.07	0.07	0.06	0.07	0.15	-	0.12	0.04	0.04	0.19	0.08
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SL 013440

SL 013440

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

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

SL 013442

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PAGE 202-4

LABORATORY OPERATIONS REPORT

EDC	1974	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975 Avg.
PRODUCT #1 PPM*														
TRANS 1,2 DICHLOROETHYLENE	1	1	-	-	-	8	-	-	-	-	-	-	-	4
1,1 DICHLOROETHANE	15	15	-	-	-	15	-	-	-	-	-	-	-	15
CIS 1,2 DICHLOROETHYLENE	7	4	-	-	-	16	-	-	-	-	-	-	-	10
CHLOROFORM	53	14	-	-	-	9	-	-	-	-	-	-	-	12
ETHYLENE DICHLORIDE (WT. %)	99.979	99.996	-	-	-	99.981	-	-	-	-	-	-	-	99.989
1,1,2 TRICHLOROETHANE	21	0	-	-	-	23	-	-	-	-	-	-	-	12
ETHYLENE CHLOROBROMIDE	5	(1	-	-	-	6	-	-	-	-	-	-	-	3
ETHYL CHLORIDE	19	5	-	-	-	(1	-	-	-	-	-	-	-	3
UNIDENTIFIED	3	0	-	-	-	-	-	-	-	-	-	-	-	-
H ₂ O	34	28	-	-	-	22	-	-	-	-	-	-	-	25
FE	0.07	0.06	-	-	-	0.05	-	-	-	-	-	-	-	0.06
HCL	1.01	0.37	-	-	-	0.85	-	-	-	-	-	-	-	0.62
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CONFIDENTIAL
Subject to Protective Order
of 14th Judicial District Court
No. 91-1145

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LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS' REPORT

PAGE 202-5

EDC		1974 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975 AVG.
PRODUCT	#2 PPM*														
TRANS 1,2 DICHLOROETHYLENE		4	3	2	(1	(1	1	(1	(1	(1	6	2	(1	(1	1
1,1 DICHLOROETHANE		16	15	12	13	11	13	17	16	8	21	18	19	19	15
CIS 1,2 DICHLOROETHYLENE		7	11	4	6	6	2	2	3	6	7	12	9	6	6
CHLOROFORM		72	10	6	38	61	7	49	22	5	72	139	15	15	37
ETHYLENE DICHLORIDE (WT. %)	99.978	99.993	99.984	99.981	99.968	99.991	99.938	99.931	99.992	99.981	99.964	99.988	99.993	99.975	
1,1,2 TRICHLOROETHANE		15	1	5	13	16	4	19	11	3	5	20	32	8	11
ETHYLENE CHLOROBROMIDE		5	2	(1	(1	2	2	1	(1	2	2	4	6	5	2
ETHYL CHLORIDE		29	2	1	11	(1	4	33	9	(1	4	9	6	5	7
UNIDENTIFIED		4	0	0	0	(1	(1	2	(1	2	0	1	0	0	(1
H ₂ O		35	38	26	23	27	57	31	23	24	36	23	24	24	30
FC		0.04	0.05	0.01	0.02	0.02	0.18	0.21	0.06	0.06	0.02	0.03	0.08	0.07	0.07
HCL		1.05	0.70	0.82	1.16	1.20	2.56	1.74	0.77	0.96	1.11	1.09	1.32	0.98	1.10

SL 013444

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 92-1145

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LABORATORY OPERATIONS REPORT

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

SL 013446

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

LAKE CHARLES, LOUISIANA

PAGE 202-8

LABORATORY OPERATIONS REPORT

EDC		1974 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975 AVG.
REACTOR #3	WT. %														
ETHYLENE DICHLORIDE		97.94	99.30	99.26	98.04	97.17	99.36	99.64	97.19	99.34	99.42	98.76	99.30	99.52	98.86
TRICHLOROETHYLENE		0.05	0	0	0	(0.01	0	0	0.02	0	0	(0.01	0	0	(0.01
PERCHLOROETHYLENE		(0.01	0	(0.01	(0.01	0.01	(0.01	(0.01	0.02	0	0	0.02	0	(0.01	(0.01
1,1,2 TRICHLOROETHANE		1.11	0.50	0.52	1.33	1.72	0.42	0.19	1.52	0.28	0.35	0.87	0.39	0.32	0.62
U-TETRACHLOROETHANE		(0.01	0	0	0.01	0.02	0	0	(0.01	0	0	0	0.01	0	(0.01
S-TETRACHLOROETHANE		0.44	0.19	0.14	0.58	0.95	0.12	0.07	1.13	0	0.02	0.13	0.11	(0.01	0.29
PENTACHLOROETHANE		(0.01	0	(0.01	0.01	0.01	(0.01	(0.01	0.01	0	(0.01	(0.01	0	0	(0.01
ETHYLENE CHLOROBROMIDE		0	0	0	0	0	0	0	0	0	0	0	0	(0.01	(0.01
ETHYL CHLORIDE		0.05	(0.01	0.05	(0.01	(0.01	0.01	0.01	0.02	0.02	0.16	0.05	0.10	0.06	0.04
UNIDENTIFIED		0.40	(0.01	(0.01	(0.01	0.10	0.08	0.09	0.07	0.16	0.03	0.16	0.09	0.06	0.07
H ₂ O	PPM	(226	(198	(69	(147	(95	(83	(105	(109	(118	(84	(243	(229	(222	(144
TOTAL FE AS FeCl ₃	%	0.54	0.43	0.26	0.39	0.27	0.19	0.22	0.28	0.51	0.19	0.56	0.53	0.51	0.36
TARS	%	4.14	1.67	0.56	1.07	0.78	1.17	1.22	1.20	1.54	1.23	1.97	1.64	2.25	1.36
SPECIFIC GRAVITY 60°-60°F		1.289	1.271	1.302	1.266	1.264	1.265	1.274	1.280	1.281	1.262	1.276	1.271	1.273	1.274
SL 013447															

CONFIDENTIAL:
 Subject to Protective Order
 of 14th Judicial District Court
 No. 91-1146

LABORATORY OPERATIONS REPORT

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

PAGE 202-10

[illegible]

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PAGE 202-11

LABORATORY OPERATIONS REPORT

"TRI-ETHANE"®	1974	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975 Avg.
TCE REACTOR WT. %														
ETHYL CHLORIDE	(0.01	0	0	0	0	0	0	0	(0.01	0	0	0	0	(0.01
CIS 1,2 DICHLOROETHYLENE	(0.01	0	0	0	0	0	0	0	0	(0.01	0	(0.01	0	(0.01
1,2 DICHLOROETHANE	61.90	63.54	60.89	71.14	76.19	74.35	73.35	73.95	70.11	65.07	60.08	52.39	54.64	66.31
TRICHLOROETHYLENE	0.02	0	0	0	0	0	0	0	0	0	0	(0.01	0.01	0.00
1,1,2 TRICHLOROETHANE	33.11	31.77	33.99	26.24	22.04	23.38	24.32	24.09	27.10	30.90	34.36	39.99	37.64	29.65
U-TETRACHLOROETHANE	1.99	2.12	2.27	1.28	0.69	0.81	0.86	0.79	1.12	1.72	2.36	3.37	2.84	1.69
S-TETRACHLOROETHANE	2.31	2.34	2.61	1.29	0.73	0.99	1.05	0.99	1.42	2.05	2.78	4.11	3.45	1.98
PENTACHLOROETHANE	0.10	0.09	0.11	0.03	0.02	0.02	0.04	0.02	0.05	0.10	0.17	0.20	0.15	0.08
FE PPM	16	16	6	7	4	13	15	10	22	5	3	9	15	10
HEAVIES STILL REFLUX														
CIS 1,2 DICHLOROETHYLENE *	48	95	58	0	54	47	33	51	53	32	33	43	41	45
1,2 DICHLOROETHANE *	3	14	4	0	0	9	2	0	0	0	2	0	4	6
TRICHLOROETHYLENE *	98	199	130	476	112	96	38	199	118	118	87	112	83	147
1,1,2 TRICHLOROETHANE Wt. %	99.92	99.88	99.89	99.85	99.95	99.80	99.95	99.96	99.91	99.90	99.90	99.90	99.90	99.90
U-TETRACHLOROETHANE *	456	394	551	11	10	2	0	3	272	165	216	435	265	194
H ₂ O PPM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FE PPM	(1	(1	(1	4.2	2	1	(1	(1	2	(1	(1	-	(1	1
LIGHT STILL REFLUX PPM														
H ₂ O				(1	-	-	-	-	-	-	-	-	-	(1
FE	4	4	2	2	4	3	8	3	4	3	6	3	3	4
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Subject to Protective Order														
of 14th Judicial District Court														
No. 91-1145														

SL 013450

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

[illegible]

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

[illegible]

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PAGE 200 14

SL 013453

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

PAGE 202-15

[illegible]

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

SL 013455

SL 013457

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

VINYL CHLORIDE		1974 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975 AVG.
FEED TO UNIT		% EDC	99.98	99.99	99.99	99.98	99.96	99.99	99.87	99.97	99.98	99.97	99.96	99.99	99.99
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	0.02	0.02	0.02	0.03	0.03	0.04	0.06	0.06	0.08	0.11	0.11	0.10	0.06
CHLOROF RM	WT. %	0.13	0.04	0.02	0.05	0.07	0.03	0.08	0.07	0.02	0.15	0.30	0.13	0.09	0.09
1,2-DICHLOROETHANE	WT. %	99.68	99.86	99.93	99.83	99.57	99.78	99.65	98.78	98.96	98.29	98.85	99.26	99.46	99.35
OTHERS	WT. %	0.01	0.01	(0.01	0.01	(0.01	(0.01	0.02	(0.01	0.01	0.01	(0.01	0.01	(0.01	(0.01
H ₂ O	PPM	67	55	36	24	39	75	41	26	27	48	42	48	43	42
HCl	WT. %	0.03	0.01	(0.01	(0.01	0.01	0.01	0.01	0.04	0.03	0.04	0.03	0.05	0.04	0.02
FE	PPM	0.37	0.62	0.30	0.27	0.30	1.15	0.91	1.13	0.43	0.74	1.36	0.83	3.08	0.93
Cl ₂	PPM	(1	1	(1	(1	(1	(1	(1	(1	(1	2	(1	(1	1	(1
ABSORBER-STRIPPER COLUMNS															
QUENCH LIQUOR															
VINYL CHL. RIDE	WT. %	7.04													
VINYLDIENE CHLORIDE	WT. %	0.02													
1,1,2 DICHLOROETHYLENE	WT. %														
1,1-DICHLOROETHANE	WT. %	0.05													
CHL. PROPENE	WT. %	0.02													
CHLOR F RM	WT. %	0.04													
1,2-DICHLOROETHANE	WT. %	92.80													
OTHERS	WT. %	0.04													
H ₂ O	PPM	146	164	209	-	214	269	147	82	135	-	-	-	-	174
HCl	WT. %	0.96	-	-	-	-	-	-	-	-	-	-	-	-	-
FE	PPM	16.64	8.17	3.78	-	2.36	5.80	4.07	0.75	0.62	-	-	15.2	-	5.09
FURNACE FEED		% CCl ₄	0.05	(0.01	(0.01	0.02	0.03	0.01	0.03	-	-	0.48	0.34	0.32	0.14

SL 013458

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

SL 013459

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

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PAGE 202-21

SL 013460

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

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

PAGE 202-22

VINYL CHLORIDE	1974 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975 AVG.
HEAVIES STILL														
FEED														
VINYLDENE CHLORIDE WT. %	0.01	0.02	0.01	0.01	0.02	0.01	0.03	0.02	0.01	0.02	0.02	0.01	0.01	0.01
1,1-DICHLOROETHANE WT. %	0.07	0.05	0.02	0.03	0.05	0.07	0.07	0.07	0.08	0.13	0.20	0.19	0.22	0.10
C-1,2-DICHLOROETHYLENE WT. %	0.01	0	0	0	0	0	0	0	0	0.03	0.01	0.01	0.01	0
CHL ROP RM WT. %	0.22	0.09	0.04	0.06	0.08	0.05	0.05	0.08	0.02	0.24	0.53	0.27	0.18	0.14
1,2-DICHLOROETHANE WT. %	99.21	99.61	99.82	99.75	99.34	99.48	99.32	99.22	99.02	97.22	97.19	97.88	97.82	98.81
1,1,2-TRICHLOROETHANE WT. %	0.13	0.07	0.10	0.05	0.06	0.06	0.09	0.13	0.16	0.18	0.25	0.16	0.27	0.13
OTHERS WT. %	0.05	0.02	0	0.02	0.08	0.06	0	0.04	0.10	0.17	0.29	0.32	0.47	0.13
H ₂ O PPM	69	51	54	18	33	0.31	44	32	46	42	29	45	21	37
HCl WT. %	0.15	0.01	0.01	0.01	0.02	0.01	0.01	0.03	0.04	0.10	0.05	0.07	0.04	0.03
Fe PPM	4.01	2.01	2.75	2.34	3.07	6.00	3.82	4.13	5.00	5.27	5.59	5.21	4.04	4.10
Cl ₂ PPM	(1	3	1	2	2	(1	(1	(1	(1	4	1	(1	(1	1
BOTTOMS														
CHLOROFORM WT. %	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0
1,2-DICHLOROETHANE WT. %	80.72	90.01	92.48	88.26	78.84	79.31	78.26	72.21	81.33	86.01	83.65	81.30	69.70	81.78
Trichloroethylene Wt. %	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1,1,2-TRICHLOROETHANE WT. %	11.52	5.68	6.44	7.64	6.07	6.98	9.01	12.54	8.81	1.21	7.15	5.82	14.04	7.62
OTHERS WT. %	7.58	4.32	1.07	4.10	20.13	13.71	12.73	12.54	9.86	1.70	9.20	12.88	17.01	9.94
HCl WT. %	0.03	0.04	0.04	0.04	0.11	0.06	0.02	0.02	0.03	0.04	0.03	0.03	0.05	0.04
Fe PPM	80.34	82.46	56.83	93.80	58.63	41.00	41.00	37.50	24.10	44.82	31.60	44.60	64.22	51.71
WASTE-DOPP KETTLE BOTTOMS														
1,2-DICHLOROETHANE WT. %														
PERCHLOROETHYLENE WT. %														
1,1,2-TRICHLOROETHANE WT. %														
1,1,1,2-TETRACHLOROETHANE WT. %														
1,1,1,2,3-PENTACHLOROETHANE WT. %														
OTHERS WT. %														
Fe PPM														
TARS WT. %														
RESIDUE WT. %														

SL 013461

CONFIDENTIAL:
Subject to Protective Order
of 14th Judicial District Court
No. 91-145

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PAGE 202-23

SL 013462

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No. 91-1145

LABORATORY OPERATIONS REPORT

PAGE 202-24

LABORATORY OPERATIONS REPORT															
MERCURY CELLS		1974 AVG.	JAN	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1975 AVG.
Cell Feed Brine															
NaCl	GPL	298	301	296	302	303	302	300	303	309	305	303	301	296	302
NaClO ₃	GPL	2.63	1.81	1.73	1.09	0.77	0.80	0.77	0.45	0.60	0.85	0.77	0.83	0.86	0.94
Na ₂ SO ₄	GPL	1.84	2.25	2.52	2.61	2.00	1.93	2.12	2.80	2.02	1.72	2.77	3.00	3.26	2.42
Insolubles	PPM	(10	(10	(10	(10	(10	(10	(10	(10	(10	(10	(10	(10	(10	(10
Turbidity	JTU	2.4	3.2	3.3	2.5	3.5	4.2	3.1	3.1	1.7	1.5	2.1	1.3	1.6	2.6
NH ₃	PPM	(0.1	(0.1	(0.1	(0.1	(0.1	(0.1	(0.1	(0.1	(0.1	(0.1	(0.1	(0.1	(0.1	(0.1
Fe	PPM	0.08	0.09	0.15	0.09	0.31	0.71	0.43	0.40	0.08	0.11	0.09	0.06	0.11	0.22
CaO	PPM	14.1	14.5	14.5	13.2	12.1	10.5	14.9	12.8	9.6	13.4	15.1	11.4	10.6	12.7
MgO	PPM	0.84	0.95	0.78	0.81	1.25	0.86	0.85	0.58	0.63	0.59	0.66	0.54	0.56	0.76
SiO ₂	PPM	26	38	52	38	35	32	32	26	24	30	28	31	-	33
MN	PPB	4	3	5	2	4	5	12	6	4	6	4	3	5	5
Cu	PPB	21	17	12	6	8	6	9	13	4	5	9	9	6	9
Cr	PPB	1	(1	(1	(1	(1	2	(1	1	1	(1	1	1	1	(1
Mo	PPB	(1	(1	(1	(1	(1	(1	(1	(1	(1	(1	(1	(1	(1	(1
Al	PPM	0.20	0.07	0.04	0.02	0.01	0.08	0.09	0.10	0.10	0.20	0.12	0.14	0.13	0.09
V	PPB	3	(1	(1	(1	2	(2	(1	6	11	(2	10	4	(1	3
Depleted Brine															
Fe	PPM	(.12	0.21	0.26	0.15	0.28	0.20	0.16	0.14	0.13	0.14	0.14	0.09	0.21	0.18
Hg	PPM	15.0	13.0	11.8	9.7	11.7	14.1	9.7	9.7	9.9	11.7	11.6	12.4	23.4	12.4
DI Water To Head Tank PPM NaCl		13	8	10	9	10	10	10	6	3	4	3	2	2	6
Unfiltered MC-50															
Hg	PPM A.B.	3.2	0.67	1.07	3.80	3.24	0.93	3.50	2.50	2.60	0.92	2.48	4.80	4.50	2.58
Fe	PPM A.B.	2.5	0.3	0.4	0.4	0.6	0.3	0.4	0.6	0.4	0.8	0.8	1.1	0.9	0.6
Ni	PPM A.B.	0	0	-	-	-	-	-	-	-	-	-	-	-	-
Total Solids	PPM A.B.	4	(10	(10	(10	10	15	16	5	(10	(10	(10	(10	12	7

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

PAGE 202-25

METALS IN MERCURY CELL FEED BRINE			1974 AVG.	JAN	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1975
Test	NaCl	GPL	299	301	299	292	302	302	301	295	305	301	301	300	297	300
AA	Al	PPB	41	89	14	(3	(1	(4	56	115	61	128	14	83	134	58
AA	Sb	PPB														
C	As	PPB	(30	(1	(1	(1	(1	7	(1	(1	(1	(1	(1	(1	(1	(1
SE	Ba	PPM	(1	9	4	3	1	2	3	3	3	(1	(1	(2	(1	2
AA	Be	PPB	(2	(1	(1	(2	(1	(3	(2	(15	(1	(1	(1	(2	12	2
SE	B	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
AA	Cd	PPB	2	(1	(1	(1	(1	(1	(1	(1	2	2	1	10	1	1
T	CaO	PPM	11.2	9.22	12.20	12.20	9.10	9.2	9.7	13.7	10.9	8.3	13.4	7.3	9.0	10.4
AA	Cr	PPB	(3	(1	(1	(1	19	(1	1	1	1	1	1	1	1	2
AA	Co	PPB	7	1	(1	(1	4	5	(1	(1	(1	(1	1	(1	(1	1
AA	Cu	PPB	25	19	13	8	4	7	7	10	18	8	3	11	7	10
C	Fe	PPM	0.04	0.03	0.05	0.01	0.08	0.08	0.39	0.20	0.06	0.04	0.05	0.02	0.03	0.09
AA	Pb	PPB	12	1	4	2	6	(1	4	5	3	5	3	4	12	4
SE	MgO	PPM	0.6	0.74	-	0.60	0.76	0.79	0.70	0.52	0.35	0.47	0.09	0.58	0.15	0.52
AA	Mn	PPB	2	2	2	(1	2	3	9	7	6	4	1	1	2	3
AA	Hg	PPM	16	33.3	40.8	11.7	9.2	11.7	12.5	9.2	9.1	12.5	12.5	11.7	18.3	16.0
AA	Mo	PPB	(1	(1	(1	(1	(1	(1	(1	(1	(1	(1	1	1	(1	(1
AA	Ni	PPB	24	20	20	19	21	41	15	13	10	11	8	33	7	18
C	SiO ₂	PPM	22	34	38	39	40	24	30	33	28	-	24	30	28	32
SE	Sr	PPB	(1.0	(1.0	(1.0	(1.0	(1.0	(1.0	(1.0	(1.0	(1.0	(1.0	(1.0	1.0	(1.0	(1.0
AA	Sn	PPB	(1.0	-	-	-	-	-	-	-	-	-	-	-	-	-
AA(D)	Ti	PPB	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SE	W	PPB	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA	V	PPB	(2	(1	(1	(1	(1	(3	(2	(5	(1	1	(2	(2	(2	(2
AA	Zn	PPB	34	36	36	37	23	64	36	-	64	44	571	125	158	109
SE	Zr	PPM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AA - Atomic Absorption																
C - Colorimetric																
SE - Spectrographic Emission																
T - Titration																
(D) - Test Being Developed																

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No. 91-1445

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

PAGE 202-28

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PAGE 202-29A

LABORATORY OPERATIONS REPORT

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PAGE 202-30

LABORATORY OPERATIONS REPORT

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LABORATORY OPERATIONS REPORT

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

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PAGE 202-32

LABORATORY OPERATIONS REPORT

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PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

LABORATORY OPERATIONS REPORT

PAGE 202-33

INCINERATOR	1974 AVG.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1975 AVG.
WASTE GAS FEED Wt. %														
C ₂ H ₄	9.15	15.43	-	-	-	-	-	-	-	-	-	-	12.49	13.96
HCl	19.94	21.56	-	-	-	-	-	-	-	-	-	-	12.42	16.99
EC	0.83	0	-	-	-	-	-	-	-	-	-	-	0.60	0.30
VDC	1.81	0.90	-	-	-	-	-	-	-	-	-	-	1.44	1.17
EDC	1.97	2.75	-	-	-	-	-	-	-	-	-	-	0.96	1.86
Perchlor	0.16	0	-	-	-	-	-	-	-	-	-	-	0.13	0.06
Trichlor	1.26	0.01	-	-	-	-	-	-	-	-	-	-	0.79	0.40
Trans	1.93	0.85	-	-	-	-	-	-	-	-	-	-	1.06	0.96
Cis	1.30	0.52	-	-	-	-	-	-	-	-	-	-	0.81	0.66
Other	0.13	0	-	-	-	-	-	-	-	-	-	-	-	0
No. 1 INCINERATOR														
HCl in Stack PPM	165	-	-	-	-	189	91	44	19	86	27	25	28	64
Cl ₂ in Stack PPM	191	-	-	-	-	192	93	29	52	68	26	29	43	66
HCl in Effluent GPL	15.3	12.4	8.9	4.6	5.0	4.2	3.6	8.4	10.2	6.5	9.2	9.9	11.7	7.9
Stack HCB PPM														
Aqueous HCB PPM														
No. 2 INCINERATOR														
HCl in Stack PPM	155	-	-	-	-	219	204	96	116	300	28	25	28	128
Cl ₂ in Stack PPM	191	-	-	-	-	199	141	52	104	112	28	28	43	88
HCl in Effluent GPL	18.3	-	4.8	5.1	4.9	4.1	3.6	4.9	8.8	7.8	9.3	9.0	10.5	6.6
Stack HCB PPM														
Aqueous HCB PPM														
STACK GAS ANALYSES PPM														
CO														
NOX														
Organics														
CH ₄														
HCl														
Cl														

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No. 91-143

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

GENERAL MISCELLANEOUS DATA

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Subject to Protective Order
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No. 93-1145

SL 013475

PAGE 209-1

"TRI-ETHANE" ® DEPARTMENT OPERATIONS REPORT

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

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

PAGE 209-3

TRI-ETHANE DEPARTMENT OPERATIONS REPORT

MATERIAL BALANCE	1974 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975 AVG.
CARBON - TONS														
TOTAL CARBON IN FEED	1533.5	1800.7	1769.3	1010.7	817.4	867.3	890.3	946.7	1087.8	982.9	1819.1	1922.4	1857.2	1314.3
CARBON IN PRODUCTION	1384.6	1611.4	1560.0	967.5	750.0	769.4	792.5	869.2	1042.4	875.3	1565.9	1579.4	1680.2	1171.9
CARBON LOSS IN PROCESS	148.9	189.3	209.3	43.2	67.3	97.9	97.8	77.5	45.4	107.6	253.2	343.0	177.0	142.4
ACCT. LOSS IN STILL BOTTOMS	2.8	0.0	0.0	0.0	0.0	13.1	0.0	0.0	0.0	0.0	22.6	0.0	0.0	3.0
MISC. ACCT. LOSSES														
UNACCOUNTABLE CARBON LOSS														
IN PROCESS	146.1	189.3	209.3	43.2	67.3	84.8	97.8	77.5	45.4	107.6	230.6	343.0	177.0	139.4
CARBON LOADING LOSS	27.3	25.2	22.8	12.2	40.4	-13.6	-2.4	50.4	14.5	13.7	12.8	-7.6	44.7	17.8
TOTAL CARBON LOSS	176.2	214.5	232.1	55.4	107.7	84.3	95.4	127.9	59.9	121.3	266.0	335.4	221.7	160.1
CHLORINE - TONS														
TOTAL CHLORINE IN FEED	9387.6	10910.1	10532.0	6028.5	5045.6	5184.5	5425.2	5706.6	6874.1	6099.3	11327.1	11795.4	11309.5	8019.8
CHLORINE IN PRODUCTION	6939.0	7941.2	7664.3	4533.8	3442.6	3677.1	3825.9	4121.5	5040.7	4245.1	7892.2	8497.3	8427.3	5775.8
CHLORINE LOSS IN PROCESS	2448.6	2968.9	2867.7	1494.7	1603.0	1507.4	1599.3	1585.1	1833.4	1854.1	3434.9	3298.1	2882.2	2244.0
ACCT. LOSS IN STILL BOTTOMS	10.2	0.0	0.0	0.0	0.0	59.5	0.0	0.0	0.0	0.0	118.2	0.0	0.0	14.8
MISC. ACCT. LOSSES														
LOSS FROM VDC REACTION PLUS														
OTHER UNACCOUNTABLE LOSSES	2438.4	2968.9	2867.7	1494.7	1603.0	1447.9	1599.3	1585.1	1833.4	1854.1	3316.7	3298.1	2882.2	2229.2
CHLORINE LOADING LOSS	126.6	111.8	100.9	54.2	178.8	-60.4	-10.4	223.1	64.1	60.7	56.6	-33.6	197.9	78.6
TOTAL CHLORINE LOSS	2575.2	3080.7	2968.6	1548.9	1781.8	1447.0	1588.9	1808.3	1897.5	1914.8	3491.5	3264.5	3080.1	2322.6
TCE REACTOR SYSTEM														
TEMP. BOTTOM OF	208	211	216	169	142	188	160	201	214	239	214	221	200	198
PRESS. TOP PSIG	49.4	50.4	50.9	49.2	46.9	46.3	45.9	48.0	48.4	47.9	48.6	50.0	48.0	48.4
EDC ABSORBER														
TEMP. CHILLED HCL OF	25	22	24	17	7	15	23	22	29	30	30	38	21	23
FEED FLOW GPM	12.4	27.3	12.0	12.0	12.0	10.0	10.0	10.0	9.5	10.0	10.0	10.0	10.0	11.9
LIGHTS STILL														
TEMP. BOTTOM OF	290	285	289	284	279	277	280	283	281	284	285	287	284	283
VAPOR OF	203	196	198	193	188	186	191	193	192	198	196	198	195	194
FEED FLOW GPM	106	113	112	98	89	80	81	90	91	91	110	113	109	98

SL 013477

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PAGE 209-4

"TRI-ETHANE" DEPARTMENT OPERATIONS REPORT

HEAVIES STILL			1974 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975 AVG.
TEMP.	BOTTOM	OF	271	279	277	272	272	270	270	267	260	262	264	269	275	270
	TOP	OF	238	241	238	239	240	240	241	239	232	233	232	234	247	238
FEED FLOW		GPM	34.3	36.5	37.5	23.5	17.1	15.8	17.2	18.4	22.6	27.1	36.0	39.4	37.0	27.3
VDC REACTOR SYSTEM																
FLWS	ICE FEED	GPM	24.0	28.7	29.0	19.3	16.1	13.8	16.2	17.1	20.9	29.6	28.0	25.2	22.2	22.2
	C.L. FEED	GPM	87.8	103.9	107.5	82.6	56.6	47.6	54.6	57.8	70.4	62.1	106.1	100.0	101.4	79.2
BOTTOM COLUMN PRESS.		PSIG	22.5	20.8	19.8	20.3	17.7	18.8	20.7	20.9	20.7	20.1	21.0	20.9	20.0	20.1
TEMP.	BOTTOM	OF	226	222	221	225	238	249	249	246	244	234	223	226	225	234
	VAPOR	OF	131	131	130	133	124	127	128	129	123	126	123	124	131	127
MC REACTOR SYSTEM																
FLWS	VDC FEED	GPM	18.7	23.7	21.8	12.9	10.2	8.2	11.2	11.5	13.2	16.7	20.0	24.1	21.8	16.3
	HCL FEED	SCFM	637	848	813	465	343	240	382	403	488	645	717	888	802	586
TEMP.	VDC VAP. BOTTOM	OF	136	153	148	137	131	133	133	135	131	131	133	132	135	136
	BOTTOM	OF	94	94	101	94	96	97	97	97	95	94	87	99	99	96
	TOP	OF	87	84	84	89	90	91	90	89	86	85	85	85	91	87
FLASHER SYSTEM																
TEMP.		OF	185	190	189	190	198	189	188	186	184	183	183	187	192	188
	Dopp Kettle Temp.	OF	176	190	192	171	173	166	164	166	169	167	172	179	187	175
STRIPPER SYSTEM																
FEED FLOW		GPM	29.4	42.1	39.7	26.3	18.9	16.2	20.6	22.5	23.7	26.2	29.0	35.6	36.5	28.1
TEMP.	BOTTOM	OF	229	234	232	231	227	230	232	232	220	219	224	223	231	228
TOP PRESS.		PSIG	21.0	21.2	20.5	18.1	16.6	18.2	18.2	20.4	17.5	16.5	18.3	16.9	17.6	18.3
TOPPING STILL SYSTEM																
TOP TEMP.		OF	167	170	160	142	134	133	136	140	135	138	146	157	158	146
MC PRODUCT																
FLOW		GPM	18.6	23.5	22.1	8.6	5.7	5.0	12.0	13.5	15.6	20.8	23.0	28.3	28.4	17.2

SL 013478

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PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

SL 013479

PERCHLORETHYLENE - TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT

GENERAL DEPARTMENT		1974 AVG.	JAN	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1975 AVG.
Records Per Prod.	T/D	211.1	246.0	262.1	182.7	215.8	164.9	90.0	129.7	246.6	190.8	144.7	168.6	180.4	185.2
Shipments	T/D	217.1	253.2	127.2	173.3	173.2	202.1	104.9	248.0	129.5	179.5	211.1	119.3	294.7	184.7
Inventory	Tons	3510.5	3619.9	6842.7	7135.5	8413.1	7259.7	6814.0	3146.9	6776.8	7114.6	5056.5	6537.8	2996.2	5976.1
Records Tri Prod.	T/D	254.0	248.7	265.4	218.9	248.1	227.7	137.4	112.8	103.1	102.7	129.3	166.7	202.0	180.2
Shipments	T/D	249.8	234.3	239.7	219.6	265.0	103.8	135.6	168.1	118.8	183.5	126.1	179.2	242.3	184.7
Inventory	Tons	3620.3	4453.1	5170.8	5147.5	4641.4	8486.2	8542.7	6831.1	6345.3	3913.8	4012.2	3638.1	3212.9	5366.3
Area Per Prod.	T/D	215.7	253.6	265.9	191.0	227.6	163.3	86.2	133.0	246.5	203.6	146.1	172.0	188.4	189.8
EDC	T/T														
Cl ₂	T/T	0.079	0.057	0.035	0.000	0.000	0.000	0.000	0.083	0.073	0.060	0.076	0.083	0.052	0.043
NH ₃	Lbs./T	7.8	4.8	7.7	7.3	3.3	9.0	6.9	6.3	6.2	2.7	5.6	4.4	5.6	5.8
Area Tri Prod.	T/D	258.2	245.2	240.2	238.5	256.4	228.4	132.6	114.6	108.5	103.6	135.5	170.1	194.0	180.6
EDC	T/T														
Cl ₂	T/T	0.050	0.036	0.022	0.000	0.000	0.000	0.000	0.052	0.046	0.037	0.043	0.052	0.033	0.027
NH ₃	Lbs./T	7.9	4.8	7.6	7.2	3.5	8.5	6.5	6.2	6.0	2.7	5.0	4.4	5.7	5.7
Total Area Prod. O ₂	T/T	0.170	0.186	0.180	0.177	0.173	0.174	0.187	0.174	0.153	0.150	0.172	0.160	0.160	0.170
N ₂	T/T	0.110	0.128	0.117	0.146	0.128	0.153	0.253	0.208	0.215	0.259	0.331	0.300	0.220	0.205
Catalyst	Lbs./T	3.68	3.76	4.01	6.53	4.7	4.0	1.4	9.1	2.0	2.8	9.1	1.6	2.2	4.3
400 # Stm.(actual) Lbs./T		5010	4688	4191	5002	4230	5023	8575	7334	4995	5986	6152	5878	5026	5590
KWH/T		79.2	81.8	81.6	94.5	85.9	97.9	151.6	125.9	98.8	118.2	131.7	110.4	92.7	105.9
Total Stillbottoms T/T		0.305	0.315	0.316	0.386	0.370	0.340	0.468	0.337	0.290	0.293	0.352	0.352	0.302	0.343
MAN HRS./T RECORDS PROD.															
Production		0.235	0.222	0.210	0.253	0.269	0.327	0.584	0.489	0.359	0.438	0.438	0.368	0.335	0.358
Maintenance		0.404	0.478	0.500	0.642	0.647	0.796	1.029	1.281	0.702	0.915	0.537	0.884	0.958	0.781
Salaried		0.062	0.060	0.059	0.066	0.064	0.073	0.141	0.120	0.080	0.096	0.111	0.074	0.074	0.085
Total		0.701	0.760	0.769	0.961	0.980	1.196	1.754	1.890	1.141	1.449	1.086	1.326	1.367	1.224
Contract Man Hrs. Included		0.015	0.042	0.022	0.030	0.000	0.061	0.130	0.326	0.164	0.153	0.290	0.222	0.196	0.136
MAN HRS./T SHIPPED															
Bulk		0.034	0.028	0.034	-	0.047	0.037	0.077	0.042	0.051	0.045	0.050	0.040	0.036	0.044
Drum		0.801	1.299	2.866	-	1.231	1.336	1.248	1.106	1.399	0.999	1.104	0.801	0.880	1.297
Salaried		0.005	0.005	0.005	-	0.009	0.007	0.012	0.006	0.008	0.008	0.007	0.006	0.005	0.007
TCE T/T PER AREA PROD.		0.887	0.872	0.853	0.928	0.969	0.945	0.829	0.914	0.958	0.908	0.663	0.632	0.708	0.848
TCE T/T TRI AREA PROD.		1.120	1.101	1.077	1.171	1.223	1.192	1.046	1.153	1.209	1.146	0.837	0.798	0.894	1.071

LAKE CHARLES, LOUISIANA

PERCHLORETHYLENE-TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT

MATERIAL BALANCE	1974 Avg.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975 Avg.
CARBON - TONS														
TOTAL CARBON IN FEED	3622.3	3909.5	3445.8	3494.9	3758.3	3225.5	1844.1	1814.8	2521.0	2208.3	2145.2	2569.6	2864.5	2816.8
CARBON IN UNSTAB. PRODUCT	3169.0	3425.1	3080.7	3118.3	3344.4	2814.9	1632.9	1692.1	2299.5	1957.2	1961.4	2325.5	2552.3	2517.0
PROCESS LOSS BY DIFFERENCE	453.3	484.4	365.1	376.6	413.9	410.6	211.2	122.7	221.5	251.1	183.8	244.0	312.2	299.8
ACCOUNTABLE PROCESS LOSSES														
REACTOR	433.3	464.4	345.1	356.6	393.9	390.6	191.2	102.7	201.5	231.1	163.8	224.0	292.2	279.8
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	453.3	484.4	365.1	376.6	413.9	410.6	211.2	122.7	221.5	251.1	183.8	244.0	312.2	299.8
CARBON LOADING LOSS	30.9	-19.2	+23.8	38.8	47.0	37.1	-50.5	59.9	-11.7	72.6	37.5	30.0	-44.3	18.4
TOTAL CARBON LOSSES	484.2	465.2	388.9	415.4	460.9	447.7	160.7	182.6	209.8	323.7	221.3	274.0	267.9	318.2
CHLORINE - TONS														
TOTAL CHLORINE IN FEED	23101.7	24392.6	21678.0	21594.0	23468.5	19757.6	10864.1	112413.8	16841.1	1436.8	12827.2	15004.2	17002.3	17512.4
CHLORINE IN UNSTAB. PRODUCT	19988.6	22033.3	20075.9	19961.0	21823.1	18008.0	9730.7	11294.8	15944.5	13244.1	11921.7	14012.9	15723.0	16147.8
PROCESS LOSS BY DIFFERENCE	3113.1	2359.3	1602.1	1633.0	1645.4	1749.6	1133.3	1119.0	896.6	1061.7	905.5	991.3	1279.3	1364.6
ACCOUNTABLE PROCESS LOSSES														
REACTOR	3013.2	2259.3	1502.1	1533.0	1545.4	1649.6	1033.3	1019.0	796.6	961.7	805.5	891.3	1179.3	1264.7
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	3113.2	2359.3	1602.1	1633.0	1645.4	1749.6	1133.3	1119.0	896.6	1061.7	905.5	991.3	1279.3	1364.6
CHLORINE LOADING LOSS	162.7	-57.2	+150.0	223.9	228.7	205.6	-272.5	329.2	-66.6	416.5	170.9	153.1	-176.5	108.8
TOTAL CHLORINE LOSS	3275.9	2302.1	1752.1	1856.9	1874.1	1955.2	860.8	1448.2	830.0	1478.2	1076.4	1144.4	1102.8	1473.4
SL 013481														

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No. 91-1-4

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

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

SL 013482

PAGE 210-4

PERCHLORETHYLENE-TRICHLOROETHYLENE DEPARTMENT OPERATIONS REPORT

REACTOR NO. 1	1974 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975 AVG.
ON STREAM TIME * HRS	8201	714	620	690	616	197	0	0	0	0	0	0	0	2837
TEMP. OF VAPORIZER LIQUOR	374	387	391	381	380	374	-	-	-	-	-	-	-	383
DOWTHERM OUT	502	465	450	548	451	452	-	-	-	-	-	-	-	473
SEC. COND. DISCH	34	28	34	38	32	32	-	-	-	-	-	-	-	33
CATALYST CHARGED LBS*	136393	6682	10618	10110	20438	2800	0	0	0	0	15000	0	0	65648
CATALYST FROM CENTRIFUG LBS*	136393	6682	10618	10110	20438	2800	0	0	0	0	15000	0	0	65648
FLOW GPM Organic	20.1	16.4	17.8	15.2	18.3	22.2	0	0	0	0	0	0	0	18.0
SCFH CL ₂	2626	646	770	0	0	0	0	0	0	0	0	0	0	283
O ₂	13449	12760	12830	12086	13650	16630	0	0	0	0	0	0	0	13591
PER-TRI RATIO	1.12	1.57	1.54	1.04	1.37	1.09	-	-	-	-	-	-	-	1.32
PER 1 TRI IN CRUDE %	82.64	89.0	84.8	83.3	82.1	86.9	-	-	-	-	-	-	-	85.2
REACTOR NO. 2														
ON STREAM TIME HRS.*	7855	632	631	621	619	188	686	685	628	0	0	504	647	5841
TEMP. OF VAPORIZER LIQUOR	374	371	372	385	372	373	339	364	360	-	-	360	358	365
DOWTHERM OUT	556	537	509	531	486	495	521	470	464	-	-	476	503	499
SEC. COND. DISCH.	38	28	26	27	29	32	35	40	31	-	-	82	28	36
CATALYST CHARGED LBS.*	130068	17881	9393	19210	15188	1750	3529	20786	3401	0	15000	6975	4730	117843
CATALYST FROM CENTRIFUG LBS.*	130068	17881	9393	19210	15188	1750	3529	20786	3401	0	15000	6975	4730	117843
FLOW GPM Organic	16.6	16.9	16.2	16.9	19.3	18.3	15.4	17.5	16.4	0	0	16.1	15.0	16.8
SCFH CL ₂	2903	1993	823	0	0	0	1460	2930	2515	0	0	2010	2200	1393
O ₂	16315	20689	20365	17864	20370	20000	16830	18280	18250	0	0	18220	17300	18817
PER-TRI RATIO	1.10	1.06	1.30	1.07	1.23	1.35	0.91	1.14	2.56	-	-	1.26	1.40	1.33
PER 1 TRI IN CRUDE %	83.71	80.4	84.1	80.5	85.9	89.0	84.1	81.8	88.3	-	-	86.1	88.9	84.9

*Totals

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

SL 013483

PAGE 210-5

No. 81-1145

PERCHLOROETHYLENE-TRICHLOROETHYLENE DEPARTMENT OPERATIONS REPORT

REACTOR NO. 3	1974 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975 AVG.
ON STREAM TIME HRS.*	8037	695	593	616	651	627	241	0	96	640	576	629	709	6073
TEMP. OF VAPORIZER LIQUOR	359	335	353	355	360	374	344	-	353	347	318	342	354	349
DORTHERM OUT	531	441	527	520	482	463	491	-	459	446	398	524	546	482
SEC. COND. DISCH.	30	21	30	31	33	36	47	-	27	37	42	22	27	32
CATALYST CHARGED LBS.*	116068	7207	13418	14310	9588	16604	1085	0	10401	5250	12483	2075	9980	102401
CATALYST FROM CENTRIFUG LBS.*	116068	7207	13418	14310	9588	16604	1085	0	10401	5250	12483	2075	9980	102401
FLOW GPM Organic	15.2	11.8	9.6	12.2	13.3	15.4	13.7	0	9.8	10.0	9.9	10.3	11.0	10.6
SCFH CL ₂	2646	1624	967	0	0	0	0	0	0	2970	2970	2090	2210	1069
O ₂	16000	17678	15990	16536	19800	22800	18090	0	15870	15030	15040	17500	18400	16061
PER-TRI RATIO	1.08	1.06	1.31	1.16	0.94	0.78	0.70	-	1.38	2.19	1.62	1.08	1.15	1.22
PER 1 TRI IN CRUDE %	85.5	83.0	88.1	84.9	83.0	84.7	81.0	-	82.3	88.9	87.7	81.1	83.3	84.4
REACTOR NO. 4														
ON STREAM TIME HRS.*	8268	672	629	686	592	671	319	661	724	720	707	550	692	7623
TEMP. OF VAPORIZER LIQUOR	354	320	374	379	369	375	324	359	358	376	355	351	358	358
DORTHERM OUT	531	439	-	-	526	501	567	485	447	450	477	480	486	486
SEC. COND. DISCH.	51	21	22	28	26	30	42	43	27	22	24	19	26	28
CATALYST CHARGED LBS.*	116068	7994	15168	16760	10988	13104	2232	21320	4102	9800	21583	4875	6480	134406
CATALYST FROM CENTRIFUG LBS.*	116068	7994	15168	16760	10988	13104	2232	21320	4102	9800	21583	4875	6480	134406
FLOW GPM Organic	17.4	20.6	19.4	19.4	19.8	19.3	13.6	14.0	13.1	14.0	12.6	12.6	12.0	15.9
SCFH CL ₂	2400	1138	518	0	0	0	3190	2210	2730	2240	2560	2050	2140	1565
O ₂	15700	19208	19658	18324	18790	20950	14260	16100	17870	20860	18130	19120	20600	18656
PER-TRI RATIO	1.16	0.79	1.15	1.08	1.05	0.93	0.82	1.48	2.95	1.98	1.70	1.18	1.19	1.36
PER 1 TRI IN CRUDE %	88.19	81.6	85.4	82.8	82.4	84.2	81.7	85.1	87.7	90.8	89.5	85.8	86.9	85.3

*Totals

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***Totals**

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

PPG II SERIES
 CHEMICAL DIVISION
 LAKE CHARLES, LOUISIANA

SL 013485

PAGE 210-7

PERCHLORETHYLENE - TRICHLOROETHYLENE DEPARTMENT OPERATIONS REPORT

REFRIGERATED BRINE		1974 AVG.	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975 AVG.
Temp. °F	#1 Warm (in)														
	#1 Cold (out)														
	#2 Warm (in)	5	-1	0	2	1	(-1	2	3	-3	-2	0	-4	-3	(-1
	#2 Cold (out)	-2	-5	-5	-2	-4	-5	-3	(0	-6	-5	-4	-6	-5	-4
PER STILL #1															
Feed	GPM	8.2	8.7	10.0	8.0	8.2	10.1	5.8	7.4	5.7	6.1	5.4	-	7.8	7.6
Reflux	GPM	13.6	14.4	13.7	14.0	13.3	14.2	15.2	15.0	14.1	12.5	12.1	-	15.6	14.0
Recycle	GPM	0.5	0.5	0.6	0.5	0.6	0.6	0.3	0.6	0.04	0.0	0.0	-	1.2	0.5
Pot Temp	°F	287	279	278	279	279	281	280	280	279	277	272	-	287	279
Overhead Temp	°F	249	241	239	242	247	243	241	239	225	240	230	-	245	239
PER STILL #2															
Feed	GPM	18.7	20.4	20.5	15.8	18.5	15.9	13.2	20.5	18.3	18.7	23.5	22.2	21.2	19.1
Reflux	GPM	19.0	17.6	17.9	17.2	17.0	19.0	20.8	24.1	28.8	25.5	29.3	28.8	27.1	22.8
Recycle	GPM	4.1	4.6	4.9	3.5	4.7	3.0	2.5	4.7	0.4	0.2	3.1	2.3	2.0	3.0
Pot Temp	°F	294	291	293	293	293	282	272	275	276	275	277	278	276	281
Overhead Temp	°F	253	251	248	249	251	248	247	245	245	246	247	250	249	248
TRI STILL #1															
Feed	GPM	15.8	15.6	14.1	12.0	13.7	13.3	9.3	-	-	-	-	7.0	9.5	11.8
Reflux	GPM	58.0	53.8	58.9	53.8	49.8	53.6	46.7	-	-	-	-	52.9	58.5	53.5
Recycle	GPM	3.5	2.5	1.2	1.1	2.3	1.8	1.4	-	-	-	-	1.3	1.7	1.7
Bottoms	GPM	15.1	15.1	14.9	14.4	15.1	15.8	13.6	-	-	-	-	11.1	13.2	14.2
Pot Temp	°F	229	226	231	226	226	228	227	-	-	-	-	228	230	228
Overhead Temp	°F	166	164	158	144	148	155	148	-	-	-	-	154	149	152
TRI STILL #2															
Feed	GPM	26.3	27.4	24.9	21.5	23.4	21.4	21.5	21.8	19.6	21.5	21.9	21.0	19.7	22.1
Reflux	GPM	92.3	93.0	93.2	93.3	92.8	88.8	96.9	101.9	101.2	102.4	102.2	103.4	100.9	97.5
Recycle	GPM	5.7	4.5	4.3	3.4	3.8	3.1	2.6	2.4	1.9	1.0	2.6	3.5	3.3	3.0
Bottoms	GPM	20.7	21.3	18.1	16.4	19.9	19.8	20.6	20.4	19.1	20.6	20.6	18.6	18.3	19.5
Pot Temp	°F	235	233	233	234	237	233	234	234	234	235	236	238	236	235
Overhead Temp	°F	158	160	159	151	149	143	145	151	163	156	148	146	143	151
DH STILL #1															
Temp. °F	Pot	183	185	188	183	182	182	179	185	185	-	-	191	201	186
	Overhead	146	155	158	155	154	165	146	151	162	-	-	134	134	151
Pot Pressure	PSIG	1.64	1.40	1.50	1.57	1.43	1.38	1.44	1.25	1.17	-	-	1.50	1.54	1.42

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PERCHLORETHYLENE - TRICHLORETHYLENE DEPARTMENT OPERATIONS REPORT No. 91-1145

[illegible]

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

HYDROGEN CHLORIDE DEPARTMENT OPERATIONS REPORT

[illegible]

***Totals**

PPG INDUSTRIES

CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

HYDROGEN CHLORIDE DEPARTMENT OPERATIONS REPORT

PAGE 211-2

GENERAL DEPARTMENT	1974 AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	AVG 1975
62B WET. HCL														
REFRIGERATION UNIT														
PRESSURE PSIG														
SUCTION	-21.4	-23.3	-24.5	-23.9	-24.0	-23.6	-23.1	-23.6	-23.3	-23.6	-24.0	-24.1	-24.6	-23.8
DISCHARGE	8.8	7.4	7.5	7.1	6.1	7.8	9.7	9.2	10.8	8.7	7.9	4.9	3.8	7.6
SFAL	30.1	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	29.0	30.0	30.0	30.0
TEMPERATURES OF														
BRINE IN	28	36	14	16	15	11	21	20	21	18	20	22	18	19
BRINE OUT	25	30	2	5	8	7	15	3	8	15	20	21	17	13
AMPS	146	144	152	138	134	140	150	149	160	145	149	147	133	145
NO. 1 STRIPPER														
FLWS														
STRONG ACID FEED GPM	39.4													
STEAM LBS/HR	7425													
TEMPERATURES OF														
TOP	227													
Gas from Cooler	40													
NO. 2 STRIPPER														
FLWS														
STRONG ACID FEED GPM														
STEAM LBS/HR														
TEMPERATURES OF														
TOP														
Gas from Cooler														
MAN HOURS/TON HCL														
PRODUCTION	0.863	0.356	0.393	0.306	0.358	0.269	0.289	0.323	0.152	0.323	0.394	0.298	0.279	0.312
MAINTENANCE	0.294	0.328	0.290	0.288	1.469	0.484	1.416	0.544	0.354	0.563	0.455	0.674	0.641	0.625
SALARIED	0.283	0.132	0.130	0.105	0.125	0.092	0.110	0.108	0.050	0.115	0.134	0.084	0.099	0.107
TOTAL	1.440	0.816	0.813	0.699	1.952	0.846	1.815	0.975	0.556	1.001	0.983	1.056	1.019	1.044
CONTRACT MAINT. INCLUDED IN ABOVE	0.000	0.000	0.000	0.000	1.197	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.100

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 No. 91-1145

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 of 14th Judicial District Court
 No. 91-1145

PAGE 212-1

PPG INDUSTRIES
 CHEMICAL DIVISION
 LAKE CHARLES, LOUISIANA
 ETHYL CHLORIDE DEPARTMENT OPERATIONS REPORT

SL 013489

GENERAL DEPARTMENT	1974 AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975 AVG
ETHYL CHLORIDE PRODUCTION T/D	154.3	124.4	135.9	116.0	130.0	156.7	158.0	160.4	153.1	134.8	162.4	164.6	163.1	146.6
EC AREA PRODUCTION T/D	153.9	124.9	135.3	116.4	132.0	156.4	157.7	160.3	152.2	134.2	163.1	164.0	164.0	146.7
EC SHIPMENTS T/D	152.8	140.2	127.3	118.5	156.3	143.2	145.7	150.8	175.4	145.3	152.3	171.9	173.6	150.0
HCL TO EC T/D	96.4	78.1	81.8	73.0	82.5	97.7	96.9	101.6	91.5	81.7	100.2	101.2	101.3	90.6
ETHYLENE TO EC T/D	71.4	57.4	61.6	51.9	61.2	73.7	75.0	74.4	68.2	60.7	75.6	74.7	76.2	67.6
PURITY %	99.92	99.93	99.89	99.94	99.89	99.89	99.95	99.93	99.95	99.94	99.91	99.86	99.93	99.92
HCL EFFICIENCY %	90.7	91.2	94.1	90.7	91.0	91.2	92.5	89.8	95.3	93.5	92.5	92.8	92.9	92.3
CARRON EFFICIENCY %	94.1	95.3	96.0	98.0	93.3	92.8	91.8	94.0	98.2	96.6	94.2	96.3	94.6	95.1
EXCESS HCL T/D	3.5	3.5	1.8	5.6	2.23	2.00	-0.58	4.79	2.92	2.74	1.92	4.08	2.31	2.78
EXCESS HCL %	4.3	4.7	2.2	8.3	2.78	2.09	-0.60	4.95	3.30	3.48	1.95	4.21	2.33	2.85
HCL TO EC TONS/TON EC PROD	0.626	0.625	0.604	0.627	0.625	0.624	0.614	0.633	0.597	0.608	0.614	0.617	0.617	0.617
C ₂ H ₄ TO EC TONS/TON EC	0.464	0.459	0.454	0.445	0.467	0.470	0.475	0.464	0.445	0.452	0.463	0.455	0.464	0.459
N ₂ TO EC TONS/TON EC	0.064	0.106	0.053	0.089	0.084	0.063	0.092	0.081	0.003	0.005	0.002	0.002	0.000	0.048
FCCL ₃ LBS/TON EC	9.2	8.8	6.7	8.5	9.5	7.4	8.4	9.0	13.3	16.6	10.2	10.9	8.4	9.8
STEAM LBS/TON EC	1311	1859	1818	2038	1716	1743	1772	1723	1756	1880	1768	1734	1692	1792
WELL WATER MGALS/TON EC	1.696	2.143	1.979	2.300	1.842	1.299	1.289	1.348	1.495	-	-	-	-	1.712
KWH/TON EC	86.2	129.3	127.3	133.5	115.9	105.6	106.1	106.9	110.9	111.9	105.1	103.4	100.1	113.0
MAN HOURS/TON EC														
PRODUCTION	0.240	0.225	0.230	0.252	0.243	0.189	0.189	0.182	0.199	0.230	0.215	0.180	0.179	0.209
MAINTENANCE	0.215	0.229	0.206	0.144	0.380	0.110	0.148	0.104	0.128	0.192	0.111	0.160	0.108	0.168
SALARIED	0.088	0.104	0.097	0.107	0.102	0.080	0.086	0.081	0.081	0.096	0.084	0.067	0.076	0.088
TOTAL	0.543	0.558	0.533	0.503	0.725	0.379	0.423	0.367	0.408	0.518	0.410	0.407	0.363	0.465
CONTRACT MAINT. INCLUDED IN ABOVE	0.002	0.025	0.078	0.013	0.018	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.012
Man Hours/T EC Shipped														
Bulk	0.031	0.025	0.034	-	0.050	0.033	0.038	0.035	0.028	0.032	0.034	0.024	0.028	0.033
Salaried	0.003	0.002	0.004	-	0.006	0.005	0.005	0.005	0.003	0.004	0.004	0.003	0.003	0.004

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Subject to Protective Order
of 14th Judicial District Court

Page 212-2

No. 91-1145

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

ETHYL CHLORIDE DEPARTMENT OPERATIONS REPORT

MATERIAL BALANCE	1974 AVG	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	1975 AVG
CHLORINE — TONS														
TOTAL CHLORINE IN FEED	2862.0	2353.8	2227.5	2201.4	2407.6	2946.2	2827.3	3061.3	2758.7	2382.4	3021.5	2952.5	3054.7	2682.9
CHLORINE IN PRODUCTION + Trans.	2594.5	2147.9	2096.7	1997.3	2191.3	2686.4	2615.2	2747.8	2628.1	2228.7	2796.1	2740.7	2838.4	2476.2
CHLORINE LOSS IN PROCESS	267.5	205.9	130.8	204.1	216.3	259.8	212.1	313.5	130.6	153.7	225.4	211.8	216.3	206.7
BLOWDOWN FROM HEAVIES STILL	14.1	19.8	14.2	14.4	14.5	21.3	15.7	17.2	19.4	16.1	16.9	37.0	44.7	20.9
CHLORINE LOADING LOSS	3.3	8.5	-9.3	6.1	32.9	-5.2	-5.1	-2.2	16.2	-9.6	11.9	-9.6	15.2	+4.2
TOTAL CHLORINE LOSS	270.8	214.4	121.5	210.2	249.2	254.6	207.1	311.3	146.8	144.1	237.3	202.2	231.5	210.9
CARBON — TONS														
TOTAL CARBON IN FEED	1868.0	1523.3	1476.0	1377.3	1587.2	1955.3	1927.3	1976.3	1809.4	1559.9	2008.0	1919.7	2022.6	1761.9
CARBON IN PRODUCTION + Trans.	1755.1	1451.1	1417.6	1350.2	1481.6	1815.6	1768.6	1858.1	1776.5	1506.6	1890.9	1849.0	1913.6	1673.3
CARBON LOSS IN PROCESS	112.9	72.2	58.4	27.1	105.5	139.7	158.7	118.2	32.9	53.3	117.1	70.7	109.0	88.6
BLOWDOWN FROM HEAVIES STILL	6.5	9.1	6.6	6.7	6.7	9.9	7.3	7.9	9.0	7.5	7.8	17.1	20.6	9.7
CARBON LOADING LOSS	2.0	5.8	-6.3	4.1	22.3	-3.5	-3.4	-1.5	11.0	-6.5	8.1	-6.6	10.3	+2.8
TOTAL CARBON LOSS	114.9	78.0	52.1	31.2	127.8	136.2	155.3	116.7	43.9	46.8	125.2	64.1	119.3	91.4

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CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PAGE 212-3

SL 013491

VINYL CHLORIDE DEPARTMENT OPERATIONS REPORT

PAGE 213-1

SL 013492

LAKE CHARLES, LOUISIANA

LAKE CHARLES, LOUISIANA

DEPARTMENT OPERATIONS

PAGE 213-2

VINYL CHLORIDE DEPARTMENT OPERATIONS REPORT

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of 14th Judicial District Court
No. 91-1145

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No. 91-1145

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LAKE CHARLES, LOUISIANA

VINYL CHLORIDE DEPARTMENT OPERATIONS REPORT

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CHEMICAL DIVISION

LAKE CHARLES, LOUISIANA

OHC-EDC DEPARTMENT OPERATIONS REPORT

PAGE 216-1

GENERAL DEPARTMENT		1974 Avg.	JAN	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1975 Avg.
OHC-EDC Production	T/D	358.5	326.7	224.0	232.6	278.3	286.6	298.1	308.3	366.8	399.2	412.8	355.7	447.2	328.0
HCL to OHC-EDC	T/D	274.3	249.9	168.1	173.2	210.5	220.2	225.9	233.4	274.8	304.1	309.3	274.1	351.2	249.6
HCL Consumed	T/T EDC	0.763	0.764	0.750	0.744	0.756	0.768	0.757	0.757	0.750	0.761	0.749	0.770	0.769	0.758
Purchased C ₂ H ₄ to OHC-EDC	T/D	105.3	96.4	62.4	64.0	77.0	81.3	84.8	88.6	101.9	114.1	118.4	101.9	132.0	93.6
% C ₂ H ₄ Purity		99.92	99.93	99.89	99.94	99.89	99.89	99.95	99.93	99.95	99.94	99.91	99.86	99.93	99.92
YIELD	%														
Cl ₂ Basis		96.6	96.3	98.2	99.0	97.4	96.8	98.9	97.7	99.3	98.1	98.6	96.6	96.9	97.8
C ₂ H ₄ Basis		93.6	92.5	95.9	97.7	97.2	96.6	99.0	96.5	99.6	98.0	97.8	97.6	97.0	97.1
Excess C ₂ H ₄	%	3.4	4.1	-1.7	-3.0	-2.4	0.3	0.4	1.4	-1.9	0.7	1.0	1.1	2.0	1.7
Excess C ₂ H ₄	T/M	107.4	117.6	-30.4	-60.6	-56.0	0.0	9.9	37.6	-59.9	24.2	38.2	32.9	80.8	11.2
Excess C ₂ H ₄	Lbs/T EDC	19.2	23.2	-9.7	-16.8	-13.4	0.1	2.2	7.9	-10.6	4.0	6.0	6.2	11.4	-0.9
Oxygen to OHC-EDC	T/D	68.3	60.4	38.6	44.2	55.2	57.5	61.8	62.9	73.7	80.4	83.1	73.0	95.8	65.6
Oxygen to OHC-EDC	T/T EDC	0.190	0.185	0.172	0.189	0.198	0.200	0.207	0.204	0.201	0.201	0.201	0.205	0.210	0.198
Excess O ₂	%	13.7	10.2	4.6	16.2	19.6	19.0	24.7	22.8	22.2	20.5	22.4	21.4	24.4	19.0
Excess O ₂	T/M	245.8	174.2	47.4	190.9	271.2	284.1	367.9	362.2	415.1	410.0	471.1	385.6	582.4	330.2
Excess O ₂	Lbs/T EDC	46.1	34.4	15.1	53.0	65.0	63.9	81.8	75.8	73.1	68.5	73.6	72.3	82.3	63.2
CRUDE EDC INVENTORY	TONS	433.1	293.3	441.7	360.3	369.9	396.1	606.9	370.0	411.7	557.3	404.5	557.4	480.2	437.5
For Per-Tri Feed	TONS	26.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
For EDC Still No. 2 Feed	TONS	100.3	26.5	26.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	155.0	167.4	169.1	45.4
For Tetra Feed	TONS	306.3	266.8	415.2	360.3	369.9	396.1	606.9	370.0	411.7	557.3	249.5	390.0	311.1	392.1
Transferred to Per-Tri	TONS	41.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transferred to EDC Still No. 2	TONS	2786.1	1154.0	682.5	2282.7	4367.1	1634.2	4942.7	6243.0	4266.2	5624.3	8766.8	5803.1	7528.8	4441.3
Transferred to Tetra	TONS	8049.5	8872.5	5501.5	5228.9	4244.7	7475.3	3746.2	3503.6	7042.1	6181.9	4129.0	5135.5	6412.5	5622.8
MAN HOURS/TON EDC PRODUCED															
Production		0.167	0.185	0.267	0.240	0.220	0.204	0.175	0.176	0.158	0.154	0.134	0.161	0.123	0.183
Maintenance		0.218	0.339	0.483	0.296	0.299	0.254	0.247	0.189	0.213	0.288	0.064	0.193	0.144	0.251
Salaried		0.065	0.070	0.102	0.093	0.084	0.076	0.079	0.074	0.059	0.056	0.058	0.054	0.048	0.071
Total		0.450	0.594	0.852	0.629	0.603	0.534	0.501	0.439	0.430	0.498	0.256	0.408	0.315	0.505
Contract Man Hours Included		0.008	0.048	0.187	0.140	0.076	0.000	0.021	0.000	0.000	0.112	0.012	0.023	0.021	0.053

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of 14th Judicial District Court

No. 91-1145

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OXYHYDROCHLORINATION OPERATIONS

CHC-EDC REACTOR #1	1974 AVG.	JAN	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1975 AVG.
On-Stream Time * Hrs.	6540	316	672	628	272	396	676	24	84	628	720	472	744	5632
Top Pressure psig	20	22	18	18	21	14	14	10	16	23	22	19	19	18
Dowtherm Temp. (From) °F	382	359	382	388	367	403	406	-	382	364	373	388	390	382
(Into) °F	340	332	352	362	337	377	378	-	352	332	345	360	364	354
Reactor Temp.														
Catalyst Bottom °F	589	588	587	588	543	583	586	570	588	595	588	588	593	583
Middle °F	537	542	537	542	549	540	544	531	533	539	533	536	529	538
Top °F	516	526	525	526	524	540	527	521	524	506	521	526	515	523
Vapor Space °F	519	531	525	526	524	527	528	519	528	525	523	527	516	525
Refrig. Cond. Outlet °F	51	46	45	46	49	45	70	74	44	48	49	47	43	50
FEEDS C ₂ H ₄ SCFH	38500	39300	34900	34100	35900	29800	26800	25000	32500	42000	37200	34600	32100	33700
O ₂ SCFH	24900	24300	22000	21500	24500	20200	19200	16000	21100	27900	25000	22800	21000	22100
HCl SCFH	87100	94700	86500	85600	90900	74700	71900	67100	78800	97400	92200	84100	81400	83800
RECYCLE ANALYSIS (Vol. %)														
CO ₂ %	33.6	39.7	41.9	44.6	49.4	51.2	43.2	24.7	47.4	45.8	42.1	35.4	40.9	42.2
C ₂ H ₄ %	47.0	43.5	42.1	37.3	32.8	33.2	31.3	39.8	40.2	41.0	35.3	44.7	39.1	38.4
O ₂ %	2.4	2.9	2.7	2.8	2.1	2.9	2.3	2.0	3.1	3.5	2.7	2.6	2.9	2.7
Catalyst Charged Lbs.	7714	24320	-	12884	4000	2540	6920	0	11060	872	16000	3200	4000	7800
REACTOR #2														
On-Stream Time * Hrs.	6254	632	524	744	504	44	0	424	612	0	0	336	669	4489
Top Pressure psig	17	16	14.7	18.1	17.5	11.3	-	10.8	11.4	-	-	17.6	15.1	14.7
Dowtherm Temp. (From) °F	371	374	394	378	372	387	-	404	404	-	-	380	393	387
(Into) °F	340	341	367	346	336	404	-	384	381	-	-	351	365	364
Reactor Temp.														
Catalyst Bottom °F	587	583	583	589	587	597	-	572	582	-	-	595	586	586
Middle °F	529	536	534	539	538	552	-	530	531	-	-	547	535	538
Top °F	518	525	524	527	524	541	-	515	512	-	-	528	518	524
Vapor Space °F	518	526	526	529	523	542	-	517	509	-	-	532	521	525
Refrig. Cond. Outlet °F	50	48	46	45	46	62	-	51	50	-	-	46	45	49
FEEDS C ₂ H ₄ SCFH	37500	38035	35285	37970	37800	30100	0	30500	30600	-	-	39500	34600	34900
O ₂ SCFH	22200	22440	18920	21250	21700	18100	0	16500	15900	-	-	23100	21500	19900
HCl SCFH	80700	75170	74110	82380	75200	62500	0	59100	63400	-	-	80600	66900	71000
RECYCLE ANALYSIS (Vol. %)														
CO ₂ %	37.6	35.8	36.9	41.9	54.3	55.4	-	39.7	46.1	-	-	39.7	33.7	42.6
C ₂ H ₄ %	47.5	45.1	43.0	39.1	29.8	36.1	-	39.3	39.6	-	-	44.1	45.5	40.2
O ₂ %	2.6	2.0	1.55	2.27	1.87	1.97	-	2.41	2.48	-	-	2.16	1.63	2.04
Catalyst Charged Lbs.	9250	13760	-	5440	7000	40000	0	14865	3840	0	0	3200	4000	11513

Total

PPG INDUSTRIES

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

OXYHYDROCHLORINATION OPERATIONS

CONFIDENTIAL:

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

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Total 1044

CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

OXYHYDROCHLORINATION OPERATIONS

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VINYLDENE CHLORIDE DEPARTMENT OPERATIONS REPORT

VINYLDENE CHLORIDE DEPARTMENT OPERATIONS REPORT

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PPG INDUSTRIES
CHEMICAL DIVISION
LAKE CHARLES, LOUISIANA

PAGE 218-1

WASTE RECOVERY DEPARTMENT OPERATIONS REPORT

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REF ID: A71153
 CHEMICAL DIVISION
 LAKE CHARLES, LOUISIANA
 INCINERATOR OPERATIONS REPORT

CONFIDENTIAL:
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 of 14th Judicial District Court
 No. 91-1145

SEE NOTE GENERAL DEPARTMENT	1974 AVG.	JAN	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1975 AVG.
VENT FLOWS M SCF/Day	2.													
No. 1 EDC	42.2	2.3	10.8	25.6	2.3	0.0	122.3	61.2	61.6	109.3	83.5	96.2	80.6	54.6
No. 2 EDC	195.6	244.6	163.3	163.1	158.6	143.9	152.3	106.6	151.3	154.7	171.1	236.5	148.4	166.2
P/T	1294.9	1209.9	1204.9	1066.4	1274.2	943.6	691.3	703.3	752.3	742.5	703.2	833.7	1001.8	927.3
OHC	312.5	289.1	257.6	235.0	304.1	295.8	300.6	269.2	270.7	250.7	285.7	235.7	284.4	273.2
LIQUID FLOWS (Cl) LBS./Day														
EDC														
Waste Recovery														
MC														
EC														
VC														
NO. 1 INCINERATOR														
Waste Gas MSCF/Day	338.9	1604.0	1624.4	988.2	1187.4	1061.8	766.3	866.9	821.7	739.5	1397.8	1607.1	688.0	1112.8
Natural Gas MSCF/Day	248.2	-	596.0	738.1	740.5	473.6	246.1	236.0	213.6	144.5	215.4	111.8	144.9	351.0
Lake Water GPM	516.6	443	385	363	396	470	432	395	466	489	405	452	475	431
Temperature °F	2426	2498	2470	2447	2462	2439	2480	2427	2449	2495	2510	2534	2494	2475
Operating Hours*	-	590	602	717	704	623	398	390	397	264	363	216	284	5548
HCl in Aqueous Sol. Tons	1003	944	605	310	350	367	193	603	676	280	673	802	994	566
NO. 2 INCINERATOR														
Waste Gas MSCF/Day	1856.1	1147.7	895.3	957.6	1333.1	986.8	997.6	225.9	677.5	696.2	208.9	0.0	1188.0	773.1
Natural Gas MSCF/Day	214.0	-	265.3	516.1	513.0	430.2	387.1	104.5	160.6	232.9	432.7	413.3	353.0	346.2
Lake Water GPM	547.7	395	451	453	478	476	475	509	442	454	405	493	504	461
Temperature °F	2473	2502	2394	2374	2456	2435	2443	2463	2398	2441	2520	2554	2575	2463
Operating Hours*	-	281	362	708	713	686	636	136	293	377	668	714	616	6190
HCl in Aqueous Sol. Tons	1574	339	209	399	423	345	250	63	326	377	723	798	985	436
SL 013503														

NOTE: EFFECTIVE 1-1-75 FLOW RATES FOR EACH INCINERATOR ARE BASED ON INCINERATOR OPERATING TIME NOT MONTHLY AVERAGES.

*Totals

(*) Estimated by Prod.