



CONTINENTAL OIL COMPANY

PETROCHEMICAL DEPARTMENT, V.C.M. PLANT

P. O. BOX 605, WESTLAKE, LOUISIANA 70669

PHONE: 518-433-6311

May 24, 1971

Dr. W.F. Milbury
Roy F. Weston Company
Lewis Lane
West Chester, Pennsylvania 19380

Dear Dr. Milbury:

This is in response to your questionnaire of April 30. Attached are the Standard Raw Waste Load Data and the Wastewater treatment Data for the Continental Oil Company Vinyl Chloride Monomer Plant. These data are for the ethylene dichloride and vinyl chloride portions of your questionnaire only.

Vinyl chloride monomer and ethylene dichloride are produced at this location. Because of the integrated and balanced nature of this process it is neither possible nor meaningful to assign separate effluent characteristics to the two products.

All analyses except pH are reported for the final plant effluent, since we do not routinely measure before the treatment steps. The pH is measured both before and after treatment.

A secondary wastewater treatment system consisting of further neutralization, aerated lagoons, and final clarification is under construction. This system will be operational in early 1972.

A handwritten signature in cursive script, reading 'L.N. Vernon'.

L.N. Vernon
Manager

LNV-BS
bcc: TS-RHG-JDM

CCR 000035097

STANDARD RAW WASTE LOAD (SRWL) DATA

- Product: Ethylene Dichloride and Vinyl Chloride Monomer
- Manufacturing Process: Oxychlorination of Ethylene
Direct Chlorination of Ethylene
- SRWL (Load based on production): Pyrolysis of EDC
1,800,000 lb./day VCM

Check (✓) Methods by Which Data Obtained

Parameter	Units (per 1000 lbs of Product)	Average Value	Actual Sampling					Other Methods		Data Not Avail- able
			Single Grab	Ran- dom	Weekly or Daily	Month- ly	Year- ly	Material Balance	Esti- mated	
Flow	gals/10 ³ lbs	280			x					
BOD ₅	lbs/10 ³ lbs	2.68			x					
COD	lbs/10 ³ lbs	4.41			x					
TOC	lbs/10 ³ lbs	1.17					x			
Susp. Solids	lbs/10 ³ lbs	2.82			x					
Total Dis.Sol.	lbs/10 ³ lbs	18.66							x	
Oil	lbs/10 ³ lbs	-								x
Phenol	lbs/10 ³ lbs	0							x	
Sulfides	lbs/10 ³ lbs									x
orides	lbs/10 ³ lbs	12.69			x					
Total Nitrogen	lbs/10 ³ lbs	0.13 (NH ₃ as N)		x						
Total PO ₄	lbs/10 ³ lbs	0.007			x					
Cyanides	lbs/10 ³ lbs	0							x	
Heavy Metals (Specify)										
Copper		0.005			x					
Iron		0.012			x					
Temp.		5°F above ambient			x					
pH		1.0*		x						
Color		35			x					
Odor		Alcoholic -T.O.= 10					x			
Acute Toxicity										
Other (Specify)										
EDC		4.08			x					

CCR 000035098

4. ☐ - SRWL Data Not Available

Note: If complete information is not available, please fill in any available data.

* Measured at entrance to treatment. All others are at least 551.

WASTEWATER TREATMENT DATA

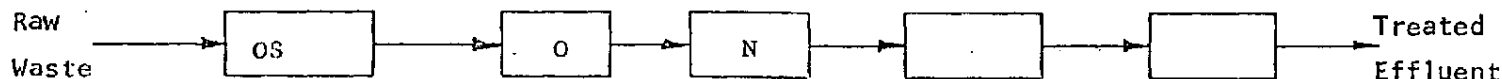
1. Product: Ethylene Dichloride and Vinyl Chloride Monomer
2. Manufacturing Process: Oxychlorination of Ethylene
Direct Chlorination of Ethylene
3. ☐ No data available on treatment Pyrolysis of EDC
4. Treatment Data:

Parameter	Percent Reduction	Check (✓) Basis of Data					No Data Available
		Actual		Estimated			
		Grab	Composite	Lab	Part of Over-all Treatment	Judgement	
BOD ₅	10					x	
COD	10					x	
TOC	10					x	
Susp. Solids	0					x	
Total Diss. Solids	0		x				
Oil	40					x	
Phenol	-					x	
Sulfides	-					x	
Chlorides	0					x	
Total Nitrogen	0					x	
Total PO ₄	0					x	
Cyanides	-					x	
Heavy Metals(Specify)							
Iron	0					x	
Copper	0					x	
Temp.*	5°F above ambient		x				
pH*	3.5		x				
Color*	35						
Odor*	Alcoholic-T.O. x -10						
Acute Toxicity*	-						
Others (Specify)							
EDC	0					x	

*Indicate effluent values

CCR 000035099

5. General Treatment Process (use legend code to indicate process units):



Legend:

OS - Floating Oil Separator

E - Equalization

N - Neutralization

CP - Chemical Precipitation

F - Flotation

C - Clarification

CC - Coagulation-Clarification

S - Stripping

TF - Trickling Filter

AL - Aerated Lagoon

ANL - Anaerobic Lagoon

AS - Activated Sludge

SP - Stabilization Pond

FC - Final Clarifier

EHL - Effluent Holding Lagoon

CO - Chemical Oxidation

CL - Chlorination (Disinfection)

O - Other Methods (Specify)
Heavy oil separation

6. If treatment data are not exclusively for this product wastewater, indicate proportion of load to treatment: All

Wastewater Flow _____ %

Organic Loading _____ %

7. Are there other product related wastewater streams not included in the above treatment system?

☒ - No

☐ - Yes

(Nature: _____)

(Disposal: _____)

8. Is there waste sludge produced during treatment?

☒ - No

☐ - Yes

(Nature: _____)

(Disposal: _____)

9. Remarks:

The ethylene dichloride facilities and vinyl chloride monomer facilities are parts of the same plant and cannot be separated.