



Interoffice Communication

To R. D. Gamblin
From J. H. Brunson
Date May 9, 1978
Subject Explanation of Variances - First Quarter, 1978

During the first quarter of 1978 the plant produced 177,467,950 pounds of VCM and 278,742,497 pounds of EDC compared to a budgeted 187,500,000 pounds and 300,300,000 pounds, respectively. The cumulative variances from standard costs during the first quarter were as follows:

	<u>Efficiency</u>	<u>Price</u>	<u>Total</u>
Variable Costs, EDC	(\$118,364)	\$656,058	\$537,694
Variable Costs, VCM	(8,185)	56,102	47,917
Subtotal	(\$126,549)	\$712,160	\$585,611
Fixed Costs			239,295
Total Variance			\$824,906

FIXED COST VARIANCE

The favorable variance of \$239,295 was due primarily to Salaried Payroll - \$14.0M, Operating Payroll - \$13.3M, Maintenance Contract Costs - \$96.9M, Research and Development - \$17.4M, Sales and Use Taxes - \$85.9M, and Depreciation - \$22.3M. The above were partially offset by major unfavorable variances for Maintenance Payroll - \$19.3M and Operating Supplies - \$17.1M.

VARIABLE COST VARIANCE

Variable costs were \$585.6M favorable for the first quarter of 1978. Raw Materials were \$379.1M favorable due to a \$559.4M price variance which was offset by an \$180.3M unfavorable efficiency variance. Processing Supplies were \$96.3M favorable and Utilities were \$92.5M favorable. A breakdown of these and other major variances is presented in the variable cost section of this report.

J. H. Brunson
J. H. Brunson

APPROVED: *JAD Brunson*

is
Enc
CC + enc:
JAD-JF-JRH-HDG
REL-BRJ-DDT

CCR 000055806

ANALYSIS OF VARIABLE COSTS
FOR THE FIRST QUARTER OF 1978
LAKE CHARLES VCM PLANT

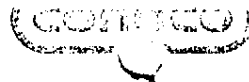
Total variance from standard: \$585,611 Favorable

	<u>Variance</u>	<u>Explanation</u>
Chlorine + HCl	\$ 325,849	A favorable chlorine price variance of \$348,498 was offset by an unfavorable efficiency variance of \$22,649. This inefficiency was due to above budget by-product production caused by poor operation (stability, fractionation) of the light ends column.
Ethylene	51,010	A favorable ethylene price variance of \$210,947 was offset by an unfavorable efficiency variance of \$159,937 which was due to above budget by-product production caused by poor operation (stability, fractionation) of the light ends column.
Alumina Catalyst	36,237	This is primarily a favorable efficiency variance (\$36,693) due to a budgeted R-305 catalyst change-out which has not occurred.
Hydrogenation Catalyst	8,920	This is entirely a favorable efficiency variance due to a budgeted charging of the hydrogenation reactor (R-300) which has not occurred.
Caustic Solution	10,035	A favorable price variance of \$20,444 was offset by an unfavorable efficiency variance of \$10,409 which was caused by the current operating philosophy of the clean-up oxy reactors (R-304 and R-305). Through the last half of 1977 and through 1978 the oxy vent stream has been chlorinated heavier in the clean-up reactors to minimize ethylene and VCM in the oxy vent to atmosphere. This has increased the production of chlorinated hydrocarbons which react with caustic (consume caustic) in the wash system.
Nitrogen	9,477	This is primarily a favorable price variance (\$9,633).
Clam Shell	6,132	This is primarily a favorable efficiency variance (\$5,916) which reflects low oxy acid strengths and low concentrations of acidic material being scrubbed out of the oxy vent.

	<u>Variance</u>	<u>Explanation</u>
Caustic Flake	\$ 12,245	This variance consists of a \$3,274 favorable price variance and an \$8,971 favorable efficiency variance. The explanation for this favorable variance has not been determined
Electricity	9,123	A \$4,370 favorable price variance was complemented by a \$4,753 favorable efficiency variance which was due to high production rates. Electricity consumption is relatively independent of production rates; therefore, high rates tend to reflect favorable variances.
Steam	91,552	This variance consists of a favorable price variance of \$86,471. The remaining favorable efficiency variance (\$5,081) was the result of lower than normal reflux rates on the light ends column which were required to maintain stability of the column. Also, contributing to the favorable efficiency variance was deep cracking depth.
Natural Gas	(8,112)	A favorable price variance of \$11,399 was offset by an unfavorable efficiency variance of \$19,511. Contributing to this unfavorable efficiency variance were the furnace decokings in January and February. A higher than budget consumption of natural gas (4.0 - 5.0%) has been consistently incurred during the first quarter and is currently being investigated.
Tars Disposal Cost	(3,117)	A favorable price variance of \$10,330 was offset by an unfavorable efficiency variance of \$13,447 which was the result of higher than normal production of tars. This was caused by poor light ends tower performance.
Light Ends to Sales	40,975	This is entirely a favorable efficiency variance due to higher than budget production of light ends caused by poor light ends tower performance.
Light Ends to Incinerator	(20,069)	This is entirely an unfavorable efficiency variance because the incinerator for disposal of this stream has not been constructed.

ANALYSIS OF FIXED COSTS - FIRST QUARTER, 1978LAKE CHARLES VCM PLANT

<u>Description</u>	<u>Standard</u>	<u>Actual</u>	<u>Variance</u>	<u>Explanation</u>
Salaried Payroll	\$200,646	\$186,647	\$ 13,999	The favorable variance was due to the Office Manager position being unfilled for one month, Senior Analyst position being unfilled for two months, and to most budgeted salary increases for 1978 not being implemented during the first quarter.
Operating Payroll	223,206	209,859	13,347	The favorable variance was due primarily to not filling new positions for incinerator during the quarter - \$8.3M and to vacation coverage overtime being less than anticipated - \$6.0M.
Maintenance Payroll	156,693	175,972	(19,279)	The unfavorable variance was due to OMS labor costs which will be capitalized after the end of the quarter and which were not included in the expense budget - \$18.6M.
Operating Supplies	82,602	99,729	(17,127)	The unfavorable variance was due to expenditures greater than anticipated for Safety Supplies - \$6.1M, Office Supplies - \$2.2M, Refrigerant Supplies - \$6.0M, and Waste Treating Chemicals - \$7.1M. The above unfavorable variances were partially offset by favorable variances for Miscellaneous Supplies - \$1.8M and Nitrogen - \$2.4M.
Maintenance Contract Costs	182,760	85,872	96,888	The favorable variance was due to no charges during the quarter for the extraordinary portion of the budget - \$103.2M.
Research & Development	36,249	18,815	17,434	The favorable variance was due to budgeted project work not being started during the first quarter. These projects include oxy vent stack cleanup - hydrocarbons, salt removal from plant heavy ends, and oxy catalyst life work.
Sales and Use Taxes	101,514	15,590	85,924	The favorable variance was due to material purchases for capital projects being considerably less than anticipated during the quarter with the major projects, and the approximate material under-expenditure for each, being the Incinerators - \$1,418M, Acetylene Hydrogenator - \$24M, Spare Steam Stripper - \$40M, EDC Exposure Reduction - \$100M, and HCl Recovery - \$474M.
Depreciation	311,868	289,612	22,256	The favorable variance was due to plant capital investment being approximately 2.0 MM less than anticipated. Major projects not completed as soon as expected were Process Sewer and Wet Vent Header - \$1,150M, NPDES Permit Compliance - \$440M, Pipeline to Certain-Teed - \$202M, and Retubing H-106 - \$117M.



VCM Plant

Conoco Chemicals
Continental Oil Company
P.O. Box 605
Westlake, Louisiana 70669
(318) 491-5211

CERTIFIED MAIL #316086
RETURN RECEIPT REQUESTED

May 9, 1978

Mr. Howard G. Bergman
Director, Enforcement Division
Region VI, Environmental Protection Agency
First International Building
1201 Elm Street
Dallas, TX 75270

Dear Mr. Bergman:

The purpose of this letter is to inform you of a labor problem in the Lake Charles, Louisiana area which has halted construction work on the Continental Oil Company - VCM Plant vent gas incinerator project. I was in contact with Mr. Martin Brittain of your staff by phone on May 8, 1978 related to this problem.

As you are aware, the Continental Oil Company - VCM Plant located in Westlake, Louisiana is presently operating under a waiver of compliance from certain requirements of the national hazardous emission standard for vinyl chloride (40 CFR Part 61, Subpart F) granted by your office on July 5, 1977. The key to our final compliance with the national hazardous emission standard for vinyl chloride requires installation of a thermal incineration system to thermally decompose all plant vent streams with the exception of the oxy-chlorination system vent. The incineration system is presently in construction.

On May 1, 1978 construction work in the Lake Charles area was shut down due to a strike by Teamsters Local #969 against the Association of General Contractors. Contracts between the Building Trades Council and the Association of General Contractors expired at mid-night April 30, 1978. Negotiations between the Association of General Contractors and the Teamsters broke off on April 28, 1978 without a settlement being reached leading to the Teamsters strike and the stoppage of construction work in the area until a settlement is reached. Therefore, work on Continental's incinerator project has been halted by the strike since area contractors working on the project are unable to man the job as a result of Teamster picketing. This situation is entirely outside the control of Continental Oil Company since the labor dispute is not against Continental, but against the area contractors being used on the incinerator construction project. Continental Oil Company has not been, nor will they be, included in any of the bargaining taking place between the Association of General Contractors and the Building Trades Council.

Howard G. Bergman
Page 2
May 9, 1978

The net affect of this strike will result in the delay of our compliance projects related to the national hazardous emission standard for vinyl chloride beyond the existing waiver date for completion of construction of October 1, 1978. I would anticipate that this delay will amount to the same number of days that the present work stoppage takes to reach a bargained settlement between the Teamsters and the Association of General Contractors. Therefore, I am requesting the following:

1. All compliance schedule completion of on-site construction dates contained in your letter of July 5, 1977 be extended by the same number of days that the present work stoppage lasts, with the exception of those compliance dates which we have already reported as being complete.
2. The date of final compliance and the date on which the July 5, 1977 compliance waiver terminates be extended beyond the October 21, 1978 date by the same number of days that the present work stoppage lasts.

I will continue to keep your office informed related to the work stoppage. Once a settlement is reached I will be able to inform you of the exact number of days extension I am requesting.

Sincerely,



J. A. DeBernardi

is
CC:
James F. Coerver
Technical Secretary, LACC
P. O. Box 60530
New Orleans, LA 70160

BCC:
REL-JEC-CRH-JD-GLF-PLF-JOG-JN