

The Ralph M. Parsons Company

Engineers • Constructors

617 WEST SEVENTH STREET, LOS ANGELES 17, CALIFORNIA

February 27, 1968

H. A. Butler
Downy,
Please Return
JSM

Stauffer Chemical Company
Post Office Box 605
Westlake, Louisiana 70669

ATTENTION of Mr. J. Downey

SUBJECT Stauffer Chemical Company
Vinyl Chloride Monomer Plant
Lake Charles, Louisiana
Stauffer Job No. 050-001
Parsons' Job No. 3827-1
Worthington DeMag Compressor
Letter No. P-222

Gentlemen:

Worthington has advised Parsons that the pressure drop across the intake silencer is 1.5" H₂O and 0.15" H₂O across the preliminary air filter. The pressure drop across the American Dri Pak type 72-48 is 0.5" H₂O.

The following pressure drop calculations indicate a 2.79" H₂O drop through the outlet transition of the secondary filter. They are:

Silencer	1.5"
Preliminary Air Filter	.15"
Spacer between preliminary and secondary filter	.06"
Transition to secondary filter	.40"
Secondary Filter	.50"
Outlet transition of secondary filter	.18"

Total Calculated pressure drop

2.79" H₂O ← *Set 3.50" always*

The calculated pressure drop agrees favorably with the 2.7" H₂O recorded by Stauffer via a pressure connection downstream of both filters.

Worthington's Bulletin TE-1 indicates that filter pressure drop can increase up to three times the clean value. Therefore, the pressure drop alarm switch could be set for 2.7 plus 3 (.15 + .50) equaling 5" H₂O.

$$2.7 \times 3 = 8.1 - \text{set}$$

THE RALPH M. PARSONS COMPANY

Stauffer Chemical Company
Letter No. P-222

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February 27, 1968

We hope the above information resolves the misunderstanding of the pressure drop principally related to the secondary air filter.

Very truly yours,

THE RALPH M. PARSONS COMPANY

By *G W Mickey*
G. W. Mickey

GWM:mt

CC: Mr. H. D. Butter
Mr. F. G. Michels

Mr. R. A. Harang

Mr. M. H. Swanson

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- (3) The 150 lb. steam piping on the BL-501 turbine exhaust is yet to be corrected. We will install the new piping during a planned shutdown.
- (4) The DeMag Air Compressor (BL-301) indicates a higher pressure drop across the air inlet filters than specified in the design data. We have a 2.8 inches of water pressure differential across the inlet filters vs. a data book specification of .5 inches. The compressor also appears to be consuming an inordinate amount of lubricating oil. This is being investigated by our staff.
- (5) The oxychlorination reaction structure has a noticeable oscillation when the system is dynamic. A determination of its effect on the bolted connections will have to be made.

Should any other problems appear within the next 90 days that should be recorded, we will so inform you.

Thanks again for a job well done,



J. H. Downey
Chief Engineer
Stauffer-Continental Monomer Plant

JHD/mc

cc: Mr. L. J. Hov
Mr. H. D. Butter
Mr. D. C. Coldiron
Mr. F. G. Michels
Mr. D. H. Roberts
Mr. A. P. McGuire
Mr. G. W. Mickey

CCR 000032627

STAUFFER CHEMICAL COMPANY



STAUFFER - CONTINENTAL MONOMER PLANT

P. O. BOX 605

WESTLAKE, LOUISIANA 70669

TELEPHONE
(AREA CODE 318) 433-6311

EXECUTIVE OFFICES
380 MADISON AVENUE
NEW YORK, N. Y. 10017

February 15, 1968

The Ralph M. Parsons Company
P. O. Box 1646
Lake Charles, Louisiana

Attention Mr. M. H. Swanson

Gentlemen:

SUBJECT: ACCEPTANCE OF PLANT
YOUR JOB 3827-1

This letter signifies that we have accepted the Battery Limits plant as mechanically complete and operable. On this basis you are closing your field operation.

Although the plant is obviously operable we feel it is advisable to make the following items matters of record:

- (1) There is some question in our minds that the Propylene Refrigeration System will operate at full design rate. We have experienced high liquid carryovers into the suction drums that shut the compressor down on high level before any corrective operating action can be taken. We have not operated at over 65% of process load on the refrigeration system to date.
- (2) The Propylene Compressor (BL-501) still has some mechanical problems:
 - (a) The compressor case has a gas leak
 - (b) The turbine has an oil leak on the coupling end and a high pressure steam leak on the steam chest end. The latter occurred during an operating period. There is also an inordinate amount of vibration evidenced in the turbine governor.

CCR 000032628