D. A. Olson - St. Louis

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HYDRAUL PRODUCT LINE - PCB

H. S. Bergen - HBERG
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W. D. Papageorge - WPAPA
W. R. Richard - WRICH

J. Mason

1. Completed Reformulations

Hydraul 625, AC and AC (Winter Grade) have been reformulated without PCB and are now being manufactured. Our timetable is:

May 15 - Completion of production and letter announcement that reformulated products are available.

July 15 - Most customers will have converted. Letters to others that we will not offer old products after August 15.

August 15 - Completion of switch to reformulation. The scope of these products is shown below:

	Domestic + Export (Annual)		
	Sales	Pounds	Pounds PCB
625			
AC			
AC-WG			

2. Reformulation Status

The reformulation of Hydraul F-9 has been completed and testing is underway. We expect to meet this timetable:

August 1 - Begin customer transition.
November 1 - Complete transition.

F-9 domestic and export statistics are:

Sales
Pounds
Pounds PCB

Bill Richard can best give you estimates of product reformulation dates for the remaining Hydrauls. After completion of testing, we would estimate a three-month time period would be necessary for proper assimilation in the market.

DEPOSITION EXHIBIT
Papageorge
41
PENGAD-Bayonne, N. J.

0001628

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3. Customer Containment

Pydraul is used by the metal-working industries, specifically steel, aluminum, die-casting, and foundries. The alternatives that we have available to provide improved containment on a short-term basis are limited but, on a longer-term approach, may present business opportunities to us for the control of all types of hydraulic fluids.

When viewing the magnitude of the Pydraul situation, however, we should be sure that proper perspective is maintained since the customer operations are not uncontrolled. The steel and aluminum industries are currently at the forefront of environmental contamination pressure and generally have good operating procedures and waste treatment facilities.

Several factors at customers in the die-casting (and foundry) applications help to minimize environmental loss. These are:

a. Larger customers have, in several instances, developed reclamation programs for capture and re-use of fluid. We have long assisted in these efforts and include discussion or reclamation in our technical literature. Active reclamation programs are being accomplished by:

Johnson Motors

b. Cooling water is used to control the temperature of the dies. In many shops, this water is continuously re-cycled through a cooling tower, back through enclosed water lines to each machine. These water lines are isolated and underground, thus preventing contamination by hydraulic or other fluids.

c. Our studies to date indicate that as much as 80% of the loss of hydraulic fluid is absorbed onto clay. While we have not traced the eventual disposition of the clay, this large percentage of the loss is not directly discharged into streams.

The above is pointed out, not to say that we shouldn't have a definite concern, but to show that some compensating factors do exist.

D. A. Olsen

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