Request For Capital Expenditures/Retirements

REPORTING CLASSIFICATION	DATE APPROVED	JOB ORDER NO.
D-1	3/9/81	OC-5300

DIVISION OR COMPANY: Organic Chemicals Division

LOCATION / J.O. CONTROL POINT: Chicago, Illinois

JOB TITLE: INSTALL SEMI-BULK HANDLING SYSTEM FOR LEAD STABILIZERS

SUMMARY OF AMOUNTS

DESCRIPTION	LOCAL CURRENCY	U.S. DOLLARS
ESTIMATED PROJECT COST		150,000
DISMANTLEMENT EXPENSE		
TRANSFER EQUIPMENT		
GROSS AMOUNT FOR APPROVAL		150,000
LESS TRANSFER EQUIPMENT		
LESS SALVAGE OR TRADE-IN ALLOWANCE		
NET CASH REQUIRED (GOF-3027)		150,000

RETIREMENT DATA

	AMOUNT
COST	
DISMANTLEMENT	
LESS SALVAGE	
TOTAL - CHARGE RESERVE	

ECONOMICS as called for in General Procedure Memo #3 Attachment C. (Attach calculations)

ECONOMICS PERIOD	
NET SALES	393
NAT (PROFIT/SAVINGS)	105
TOTAL INVESTMENT	150
% ROI (ON TOTAL INVEST.)	72
INTERNAL RATE OF RETURN	
PAYOUT OF NEW FIXED CAPITAL	1.2

REVISION DETAIL (GROSS AMOUNTS)

REV.#	DATE	AMOUNT	CUM. AUTHORIZATION
1			
2			
3			
4			
5			
6			
7			

DESCRIPTION AND REASONS REQUIRED

See Attachments.

Approved

MAR 16 1981

SUMMARY OF ESTIMATED COST - Details on GOF-3027

ESTIMATE NO.

STARTING DATE: Upon approval

COMPLETION DATE: Four months after approval.

ITEM NO.	DESCRIPTION	MATERIAL	LABOR	ENGINEERING	TOTAL
	Per estimate attached	129,500	10,500	3,000	143,000
	Tax	7,000			7,000
	NET CASH REQUIRED	136,500	10,500	3,000	150,000

ACCOUNTING TREATMENT

ITEM NO.		DEPR. RATE
	Dr $73,000 to PP&E Containers(2A700)	20%
	Dr $70,000 to PP&E (2A320)	7½%
	Dr $ 7,000 to Expense as incurred	

APPROVALS

NAME	DATE
PROJECT SPONSOR	
	2/4/81
	2/27/81

ACCOUNTING TREATMENT / ECONOMICS APPROVED BY DIV. CONTROLLER (CHECK BOX(ES)) ☑ ☐ L Lyon Hahn DATE 3/4/81

POST AUDIT PERIOD | POST AUDIT DUE DATE

DIVISION PRESIDENT/DIRECTOR

DISTRIBUTION: MAR 3

CORPORATE OFFICER

NA 3006 REV 5 5-77

N14646

OC-221-1063
5/65

DETAIL SHEET

SHEET NO.	JOB ORDER NO.	DATE
1		

COMPANY	LOCATION

ITEM OR CODE NO.	DESCRIPTION	EQUIPMENT OR MATERIALS	LABOR	TOTAL
1	Air Pallets 200 x $320 Average load of 1,500 lbs.; capacity 1.2 M lbs.	64,000		64,000
2	Conveyor	3,500	1,500	5,000
3	Filling System	20,000	4,000	24,000
4	Ventilation	1,500	1,500	3,000
5	Unloading System	11,000	3,500	14,500
6	Freight	1,500		1,500
7	Semi-bulk Bag Unloading	5,000		5,000
8	Semi-bulk Bags 40 x $225 Average load 1,500 lbs.; capacity 24 k lbs.	9,000		9,000
9	Engineering		3,000	3,000
10	Contingencies	14,000		14,000
11	Tax	7,000		7,000 EXPENSE
		136,500	13,500	150,000

N14646.01

Proposed Work and Cost

This order requests $150,000 for the installation of a semi-bulk filling/handling system and an initial supply of Air Pallet and semi-bulk bag containers.

Overview

Lead Stabilizers is a M$6 business with NAT profitability of 7-10%. It is a quadrant IV business being managed for cash. The U.S. market for lead stabilizers is shared equally among Cyanamid and two major competitors -- Associated Lead and Hammond Lead. The industry and its customers are under environmental pressures to reduce lead dust exposure to comply with current OSHA regulations.

Reasons For Request

OSHA regulations and environmental concerns are forcing key customers to use semi-bulk handling systems. (20% of the lead stabilizer market has installed semi-bulk systems during the past 2 years. We estimate that another 10% will be converted by the end of 1981.) Both of our major competitors are offering semi-bulk packaging and we stand to lose significant market share if we do not offer semi-bulk shipments -- Hammond and Associated both offer Air Pallets; Hammond also offers Taicon semi-bulk bags.

Our sales volume estimates follow (k lbs.):

	1980	1981	1982	1983	1984	1985
1981-85 Business Plan	6,750	6,400	7,700	7,800	8,000	8,100
Current Estimate Without Semi-Bulk	6,750	6,200	6,000	5,800	5,600	5,500
Current Estimate With Semi-Bulk	6,750	7,000	7,900	8,100	8,200	8,300

Not offering semi-bulk packaging will reduce 1981 NBT by k$200 and 1985 NBT by k$700 due to sales volume declines.

Semi-bulk handling may also help reduce lead-in-air levels in our Chicago plant bag packing area as well as reduce handling and packaging costs. No consideration of these additional benefits has been included in the project economics.

Anticipated Financial Returns

This project offers less than a one-year payback (.75 years) and will generate more than M$1 in cash through 1985 by protecting market share and volume. The 1981 forecast data in the following table of financial results assumes installation of semi-bulk packaging by June 1981:

	1979	1980	1981 Budget	1981 Forecast
Volume (k lbs.)	8,251	6,742	6,400	7,000
Net Sales (k$)	5,937	5,619	5,207	5,600
Marginal Income (k$)	2,241	2,451	2,870	3,080
Manufacturing Profit (k$)	1,553	1,782	1,512	1,700
POS (%)	26	32	29	30
NAT (k$)	454	577	392	500
NAT (%)	7.6	10.3	7.5	8.9

Details of Proposal

Manufacturing: We plan to install the semi-bulk filling and unloading system in Building 24 adjacent to the Nauta mixer, which will be tied into the semi-bulk loading system through a screw conveyor. The existing dust collector will provide sufficient ventilation.

The unloading system permits us to unload returned semi-bulk containers to drums for repackaging or rework if necessary.

We have included modifications to the Air Pallet filling/unloading systems to permit the handling of both semi-bulk bags and Air Pallets. Although most of our customers have installed or plan to install Air Pallet capability, there are a few major accounts that are using semi-bulk bags. Although we have requested funds to purchase some semi-bulk bags, they will be purchased only after obtaining a firm commitment from the customer.

Semi-bulk containers will not alter product quality or output. The semi-bulk system is expected to reduce airborne lead levels in the packaging areas; however, the magnitude of improvement cannot be estimated at this time.

We intend to color code and label the semi-bulk containers to avoid cross contamination of product types (carbonate, sulfate, phthalate). Containers will be shipped FOB Chicago and returned at Cyanamid expense.

Freight charges for return will run at most $15 per Air Pallet ($0.01 per pound of material shipped from California), and average under $10 per Air Pallet ($0.007 per pound of material shipped). These freight charges will be more than offset by reduced packaging costs($0.009 per pound for bags and pallets) and a one cent price premium for semi-bulk shipments.

We have provided for 2.5 semi-bulk containers for each pallet of material to be shipped per month. This should be sufficient to service the average account.

Contingent Future Commitments

By 1985 we estimate another 1.2M pounds of semi-bulk business, requiring additional expenditures averaging k$35 per year after 1981 to increase the number of containers and to repair/replace containers. If the product mix changes, an additional k$25 may be needed to debottleneck the filling operation. In the event that returned containers are covered with dust and become a hygiene problem, k$25 may be needed to install an enclosed cleaning facilit

Alternatives Considered

We have attempted to meet customer requirements for reducing lead-in-air levels with other products and packaging forms including dustless grades, PVC bags, and waxed stabilizers. Although several of these offerings have had some success or interest, our large volume customers are rapidly switching to semi-bulk systems as the most practical solution readily available.

We have reviewed various semi-bulk systems over the last four years, but the Air Pallet system has appeared the most practical and this has been confirmed as customers and competitors have installed Air Pallet systems. We are providing the flexibility to handle semi-bulk bags for the few customers that require them.

Risks

Enough of our customers and competitors have successfully installed Air Pallet systems that we see little technical risk. Our Azo Pigments manufacturing facility in Bound Brook has been using an Air Pallet system successfully for about one year.