TENNECO CHEMICALS

CAPITAL APPROVAL FORM

cy: LC
DER
COR
CPS

GENERAL MANAGER: M. R. HAYMON

DATE: April 3, 1980

DIVISION : POLYMERS

Rec'd 4/28/80

COPY TO:

BUSINESS GROUP	:	W. Rupp/F. S. Klopp
ACCOUNTING	:	M. C. Robinson
ENGINEERING	:	D. C. Coldiron
PURCHASING	:	R. J. Miller
TREASURER	:	J. J. Dunican
TENNECO TAX	:	
TENNECO INSURANCE	:	

cc: W. Hartmann
D. E. Rhoads
S. R. Sheeran

PROJECT APPROVAL NOTICE

TITLE : PROVIDE MORE RELIABLE HIGH PRESSURE NITROGEN SUPPLY

NUMBER : ✓ 97208

LOCATION : PASADENA

AMOUNT : $80,000

RESPONSIBILITY:

DEPARTMENT_____ INDIVIDUAL_____

EMERGENCY APPROVED PROJECT: YES ☐ NO ☒

EMERGENCY APPROVAL OFFICER:

EMERGENCY APPROVAL DATE :

BUDGET DEPARTMENT

TEN 1437

Tenneco Chemicals

CAPITAL APPROPRIATION REQUEST SUMMARY

CA [illegible] | 9 | 7 | 2 | 0 | [illegible]

DIVISION / BUSINESS GROUP Polymers LOCATION Pasadena, Texas

DIV [illegible] | 5 | 1 | 2 | 3 | 3 | 6 | 0 | 0 | 1

LE Provide More Reliable High Pressure Nitrogen Supply

AUTHORIZATION IS REQUESTED TO EXPEND NEW FIXED CAPITAL OF $ 80,000 **FOR:** installing a spare nitrogen compressor, connecting both compressors to the emergency bus and providing bottled nitrogen for backup

FINANCIAL SUMMARY (THOUSAND DOLLARS)

	FIRST YEAR 12 MOS. 19 81	AT CAPACITY 19 82
NET SALES – UNITS ( )	--	--
– $/UNIT	--	--
– DOLLARS	--	--
NET OPERATING INCOME (BEFORE TAXES)	(11.3)	(11.3)
CASH FLOW	(6.3)	(6.3)
BREAKEVEN VOLUME		

AUTHORIZATION AMOUNT (THOUSAND DOLLARS)

	REQUEST	BUDGET
FIXED ASSETS	80.0	
WORKING CAPITAL	--	
OTHER ASSETS	--	
TOTAL NEW CAPITAL	80.0	
TRANSFERRED ASSETS	--	
TOTAL PROJECT CAPITAL	80.0	

RETIRED ASSETS* None CADR NO. _____

CADR ATTACHED ☐ YES ☐ NO (EXPLAIN)

*OTHER THAN RIK

PROFITABILITY

	NEW CAPITAL	INCLUDING TRANSFERS	BUDGET
AVERAGE ROI, %	NA		
DCF, %	NA		
PAYOUT, YRS	NA		

TIME SCHEDULE

	MONTHS AFTER FINAL APPROVAL	LEAVE BLANK
START OF EXPENDITURE	2 Mos	
COMPLETION OF EXPENDITURES	14 Mos	
IN SERVICE DATE	12 Mos	
PROJECT LIFE, Yrs	16 Yrs	

STRATEGY

PRODUCT LINE PVC Homopolymer RATING _____

RETURN ON NET ASSETS EMPLOYED:

BEFORE PROJECT _____ % AFTER PROJECT _____ % (AT CAPACITY)

PROJECT TYPE

01	POLLUTION	04	DEFENSIVE / NON PROFIT	07	EXPANSION	10	OTH
02	SAFETY/HEALTH/ INSURANCE	05	COST REDUCTION	09	R&D		
03	REPLACEMENT & REPAIR	06	NEW PRODUCT	09	ENERGY		

Describe

DIVISION APPROVALS	STAFF REVIEW	CORPORATE APPROVALS
DATE	DATE	DATE
GENERAL MANAGER 5/21/79	DIRECTOR - ENGINEERING	PRESIDENT
DIRECTOR - FINANCE 5/16	DIRECTOR - PROJECTS	EXEC. VICE PRESIDENT
BUSINESS DIRECTOR	MGR. - GENERAL ENGINEERING	VICE PRESIDENT
DIRECTOR, MARKETING	INDUSTRIAL HYGIENE	VICE PRESIDENT
	ENVIRONMENTAL PROTECT	
MGR. / PLANT MANAGER	SAFETY & LOSS PREVENT.	
	ENG. CT	

TEN 1438

CAR 97208

PROVIDE MORE RELIABLE HIGH PRESSURE NITROGEN SUPPLY

SUMMARY

It is proposed that a capital expenditure of $80,000 be approved to provide for the installation of facilities to assure an adequate supply of high pressure "emergency" nitrogen in the Pasadena PVC plant. The present nitrogen supply is inadequate to assure the safe shutdown of the plant during a major power failure.

DISCUSSION

The emergency nitrogen system provides an instrument nitrogen source to critical pneumatic instruments in the PVC plant, and provides the force for injecting the emergency shortstop into the reactor. The system is also designed to allow the use of nitrogen if required for agitation of a reactor to assure adequate mixing of the emergency shortstop after an agitator failure.

The existing system consists of a pressurized nitrogen surge tank and a compressor which compresses purchased nitrogen to the required pressure. This compressor is not connected to the emergency power supply; therefore, it would be inoperable during a power failure. To provide an adequate nitrogen system would require the installation of a spare nitrogen compressor, connecting both compressors to the emergency power supply, and installing a backup bottled nitrogen system.

A more detailed discussion is included in the attached report, LCE-9-79.

Scope

The scope of the project consists of the following:

1. Purchase and installation of a second nitrogen compressor.

2. Modification of wiring to permit operation of both nitrogen compressors on the emergency power system (i.e. powered by the emergency generator).

3. Installation of facilities to permit the use of rented nitrogen cylinders.

Estimate

The attached estimate of $80,000 is based upon a budget quotation for the new compressor and standard engineering estimating techniques for the remainder of the estimate.

7/10/79