

ASARCONew York Office
Office of the Secretary

671

RECEIVED

APR 7 1982

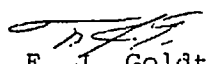
W. R. KELLY**M. A. SHARP**

April 2, 1982

Mr. W. R. Kelly:

The following appropriation was approved at the Advisory
Committee meeting held March 24, 1982:

El Paso	Enlarged Converter Shell.	\$ 950,000
New York No. 5657		
Plant No. 677	Replacement.	


F. J. Goldthwait
Assistant SecretaryFJG:dap
Enc.

cc: A. L. Labbe/L. C. Travis - w/enc.
F. R. McAllister - w/enc.
W. A. Bennis - w/enc.
W. T. Sweat
A. O. Marsh, Jr.

February 9, 1982
El Paso, Texas

Mr. Lee C. Travis, General Manager
Western Department
New York, N. Y.

APPLICATION FOR PROPERTY APPROPRIATION
CONVERTER SHELL
EL PASO PLANT NO. 677 - \$950,000

The No. 1 converter at El Paso was installed in 1913. In 1955 the converter was completely re-bricked. However, in the 70 years since installation, numerous burn-outs and hot spots have warped the shell and weakened it to such an extent that it is starting to bow in the center of the converter.

The condition of the shell is such that there is a large substantial difference in the elevation of the tuyeres which makes it extremely difficult to punch with the automatic puncher. Plates have been rolled and scabbed in various spots in an attempt to strengthen it but have been unsuccessful in maintaining the configuration of the converter.

The El Paso Plant uses three converters in order to obtain the maximum converter capacity of having two in the stack at one time. Experience has taught us that a tuyere line lasts 10 or 11 months, which means either three or four tuyere line repairs a year. With only two converters available, this would mean that during the course of a year, 30-35 converter days would be lost during tuyere line repairs which would greatly restrict the production in the Copper Department.

In addition, a new shell would enable the operators to get a better seal between the converter shell and the hood, which would greatly reduce the leakage and restrict the amount of flow going to the acid plant, as well as increasing the steam flow in the converter boilers.

The installation of a 35-foot converter will enable the Plant to produce a converter charge that will make one anode charge instead of requiring two converter charges to fill the anode. By filling the anode completely with one converter charge, the temperature of the copper will remain higher enabling the refiners to skim the anode furnace cleaner and to produce anodes faster. In addition, there will be less downtime for turn-arounds because of the larger converter.

By placing the order for the shell in early 1982, the delivery will be some time after September 1982, and the payments required on the construction of the shell would not be due until the summer of 1982.

I request approval of this appropriation in order that the productivity of the Copper Department will remain.


W. R. KELLY

WRK:gp
Encls.
cc: W. T. Sweat - Encls.



REQUEST FOR CAPITAL APPROPRIATION FORM 302

N. pp. or Supp. No. 5657
Plant App. No. 677
Plant or Unit Name El Paso Plant
Unit No. 7819
Date February 9, 1982

New Request ☒ Supplemental Request ☐
Scope Change ☐

I. DESCRIPTION OF PROPOSAL AND REASONS FOR MAKING REQUEST:

#1 Converter Shell

II. ADVANTAGES TO BE DERIVED FROM ADOPTION OF THE PROPOSAL:

Replacement of a converter shell that has been installed since 1913 with a larger converter enabling the Plant to produce copper faster.

III. ESTIMATED EXPENDITURES:

	Appropriations		
	Current Request	Previous	Total
Capital Expenditures	\$950,000	\$	\$ 950,000
Working Capital			
Capitalized Interest			
Other Expenditures			
Total	*\$950,000	\$	\$ 950,000

*TOTAL AMOUNT REQUESTED WITH THIS APPROPRIATION

IV. EVALUATION OF PROPOSAL

Internal Rate of Return: (38) %
Excluding Tax Credits (35) ~~(33)~~ %
Including Tax Credits (35) ~~(33)~~ %
Estimated Useful Life 20
Start Date March 1, 1982
Completion Date December 31, 1982
Previously Forecasted? \$750,000
Available Investment Tax Credit \$95,000
Available Energy Tax Credit \$ --

Nature of Current Request:

Maintenance	\$950,000
Legislative	
New Project	
Automobiles	
Total	*\$950,000

V. APPROVAL AND REVIEW SIGNATURES:

Recommended by [Signature] Manager
Reviewed by [Signature] Acctg. Mgr. or Chief Acct.
Approved by _____ Vice President

Reviewed by _____ Treasurer
Reviewed by _____ Controller

Approved by Advisory Committee:

Approved by Board of Directors:

Date: MAR 24 1982

Secretary: _____

Date: _____



COST DISTRIBUTION Form 302 A

N.Y. p. or Supp. No. 5657
Plant App. No. 677
Plant or Unit Name El Paso Plant
Unit No. 7819
Date February 9, 1982

I. PROJECT DESCRIPTION: #1 Converter Shell

Years (1)

1	2	3	4	5	Total
---	---	---	---	---	-------

II. CAPITAL EXPENDITURES:

Buildings					
Equipment	\$950,000				\$950,000
Mineral Land					
Other Land					
Automobiles					
Other					
Total	\$950,000				\$950,000

III. WORKING CAPITAL:

Cash					
Receivables					
Inventories					
(Current Liabilities)					
Other					
Total					

IV. CAPITALIZED INTEREST:

Total					
-------	--	--	--	--	--

V. OTHER EXPENDITURES, describe:

VI. SUMMARY OF BOOK DEPRECIABLE LIVES:

Lives	Amounts
20	\$950,000
Non-depreciable	
Total	\$950,000

Note (1): If project expenditures extend beyond five years, use additional pages and show entire cost distribution by year.

R. L. Vollmer 2/9/82
Prepared by Date



INTERNAL RATE OF RETURN DATA SHEET Form 302 B

I. PROJECT DESCRIPTION: #1 Converter Shell

N.Y. App. or Supp. No. 5651
Plant App. No. 677
Plant or Unit Name El Paso Plant
Unit No. 7819
Date Feb. 9, 1982

II. EXPENDITURES:

Years (1)

	1	2	3	4	5	Total
Source						
302 A Capital Expenditures	\$950,000					\$950,000
302 A Working Capital Requirements						
302 A Capitalized Interest						
302 A Other Expenditures						
302 A Total Appropriation Request	\$950,000					\$950,000

III. CASH PROCEEDS & I. R. R.

6 Increase in cash inflows						
7 (Increase) decrease in cash op. costs						
8 Net increase (decrease) in cash inflows						
9 Deduct Depreciation & Depletion	\$ 142,500	\$ 209,000	\$ 199,500	\$ 199,500	\$ 199,500	\$950,000
10 Taxable Earnings (Loss)	(142,500)	(209,000)	(199,500)	(199,500)	(199,500)	(950,000)
11 After-Tax Earnings, Ex Tax Credits	(76,950)	(112,860)	(107,730)	(107,730)	(107,730)	(513,000)
12 Add Back Depreciation & Depletion	142,500	209,000	199,500	199,500	199,500	950,000
13 Add Back Realization of Working Capital						
14 Cash Proceeds Excluding Tax Credits	65,550	96,140	91,770	91,770	91,770	437,000

15 I. R. R. Excluding Tax Credits 302 C

(38) %

16 Cash Proceeds Ex Tax Credits	Line 14	\$ 65,550	\$ 96,140	\$ 91,770	\$ 91,770	\$ 91,770	\$ 437,000
Add Available ITC and ETC	Tax Sect.	95,000					95,000
18 Cash Proceeds Including Tax Credits		160,550	96,140	91,770	91,770	91,770	532,000

19 I. R. R. Including Tax Credits 302 C

(33) %

Notes: (1) If project extends beyond five years, use additional copies and show entire project life by year.

R. L. Vollmer

2/9/82

Prepared by Date

ASARCO

INTERNAL RATE OF RETURN WORKSHEET Form 302 C

N.Y. or Supp. No. 5657
 Plant App. No. 677
 Plant or Unit Name El Paso Plant
 Unit No. 7819
 Date February 9, 1982

I. PROJECT DESCRIPTION: #1 Converter Shell

II. CALCULATION:

Check One: ☒ Excluding Tax Credits ☐ Including Tax Credits

(1) Year	Form 302 B	Form 302 A	Net Cash Expenditures	Form 302 B	Net Cash Flow	Discount Factor	Present Value
	Estimated Expenditures	Less Capitalized Interest		Cash Proceeds		(38) %	
0	\$ (950,000)	--	\$ (950,000)	\$ 65,550	\$ (884,450)	1.000	\$ (884,450)
1				96,140	96,140	1.380	132,673
2				91,770	91,770	1.904	174,767
3				91,770	91,770	2.628	241,178
4				91,770	91,770	3.627	332,826
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
Totals	(950,000)		(950,000)	\$ 437,000	\$ (513,000)		(3,006)
	(2)	(2)					(3)

Notes: (1) If project life extends beyond 20 years use additional forms. For calculation purposes the first year of the project should be regarded as year 0 with a 1.000 discount factor.

(2) Must agree with form 302 and for calculation purposes show all expenditures as negative numbers.

(3) The sum of all annual present value numbers is the net present value, which should be as close to zero as possible. The interest rate at which the net present value is zero is defined as the internal rate of return.



INTERNAL RATE OF RETURN WORKSHEET Form 302 C

N.Y. or Supp. No. 5657
Plant App. No. 677
Plant or Unit Name El Paso Plant
Unit No. 7819
Date February 9, 1982

I. PROJECT DESCRIPTION: #1 Converter Shell

II. CALCULATION:

Check One: ☐ Excluding Tax Credits ☒ Including Tax Credits

(1) Year	Form 302 B	Form 302 A	Form 302 B		Discount	Present Value
	Estimated Expenditures	Less Capitalized Interest	Net Cash Expenditures	Cash Proceeds	Factor (25%) (23) %	
0	\$ (950,000)		\$ (950,000)	\$ 160,550	1.000	\$ (789,450)
1				96,140	1.330	127,866
2				91,770	1.769	162,332
3				91,770	2.353	215,901
4				91,770	3.129	287,149
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
Totals	(950,000)		(950,000)	\$ 532,000		\$ 3,798
	(2)	(2)				(3)

Notes: (1) If project life extends beyond 20 years use additional forms. For calculation purposes the first year of the project should be regarded as year 0 with a 1.000 discount factor.

(2) Must agree with form 302 and for calculation purposes show all expenditures as negative numbers.

(3) The sum of all annual present value numbers is the net present value, which should be as close to zero as possible. The interest rate at which the net present value is zero is defined as the internal rate of return.

JOB #1 CUMBER SIZ PLANT 2
JOB NO. 1 AUTH. NO. 1 DRAWING NOS. 1
MADE BY G. J. J. DATE 3-31-41 CHECKED BY 1 DATE 1

ASARCO ELP 0006504

COST ESTIMATE

JOB NO. 1317351 PLANT EL
 AUTH. NO. 2-2-82 DRAWING NOS. 22
 MADE BY ASARCO DATE 2-2-82 CHECKED BY ASARCO DATE 2-2-82

CLASSIFIED MATERIAL	QUANTITIES	EST'D. LIFE	EST'D. DAYS OFF	UNIT PRICES		ESTIMATED COST		TOTAL ESTIMATED COST
				MATERIAL	LABOR	MATERIAL	LABOR	
FIELD SITE	LOT		OK				35000	35000
CONCRETE SHEET PILING KINDS END PILES, KING PILES & LINDS	20	572				450000	75000	525000
STEEL CASTINGS						23000	7000	30000
TUMBLE PLATE CASTINGS						7000	4000	11000
SHIELDS						6000	6000	12000
Pipes						2000	12000	20000
DRILL						100000	50000	150000
ROD END PIPE MANUFACTURE						8000	2000	10000
SUBTOTAL								749000
MISC & CONT								76000
FIXTURE & SUP								75000
TOTAL								900000