CENTRAL ENGINEERING DEPARTMENT

ENGINEERING AUTHORITY

CEA NO.	DATE
1430 (Rev. 2)	August 10, 1967

PRODUCT: Aroclors

TITLE: Increase Aroclor Capacity

DIVISION	PLANT
Organic	Anniston

CED APPROVAL: R. E. Howard 8/12/67

DISTRIBUTION

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CED PROJECT MANAGER: H. D. Gabelman

DIVISION REPRESENTATIVE: --

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SCOPE

Aroclor production facilities at Anniston will be expanded by the addition of tankage for storage and for the preparation of blends, drumming facilities in a new building (to be expanded on another project, CEA 1452, into a product warehouse), new and larger flakers for solid Aroclors and for biphenyl in the same building, and packaging equipment for flaked products. Tank truck loading and a new track spur with tank car loading and unloading facilities are included.

Preliminary scope of work and order-of-magnitude capital estimates have been made. An appropriation grade estimate will be prepared for transmission to the Division; engineering will proceed with design and ordering of long delivery equipment on General Manager's approval.

The expansion of Aroclor facilities at Krummrich plant, originally included in CEA 1430 for evaluation purposes, will be handled as CEA 1800.

DISTRIBUTION OF CHARGES Pre-project charges--through CED expense to Organic Division's SARE. Capitalized engineering--to CED's Uncompleted Additions to Property and then transferred to Organic Division's Uncompleted Additions to Property. Start-up and post-project charges--through CED expense to Organic Division/s SARE.

ESTIMATED "EXPENSED" ENGINEERING: $15,000

PROBABLE COST - CAPITAL PROJECT: $1,600,000

TARGET DATES

APPROPRIATION REQUEST APPROVAL: November 1967

START ENGINEERING: September 1967

START OPERATION: January 1969

DSW 182477

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CHANGE IN TIMING OF EXPENDITURES
OF A PROJECT ALREADY LISTED (LR - 786)

1. Title: Expand Aroclors to 125 $\overline{M}$ lbs./year - WGK and Anniston (No change from last listing).

2. Amount of Project: $3,000,000 - (No change from last listing)

3. Description: This project contemplates additional new facilities to increase the capacity of Aroclors from 87,000,000 lbs./yr. to 125,000,000 lbs./yr. to improve quality and to increase our storage capacity. Additions at both the Krummrich Plant and the Anniston Plant are involved. Quality upgrading is needed to meet competition overseas and to protect our position in the domestic market. These changes are required to protect our good profit position in the plasticizer, heat transfer fluid, and dielectric fluids market.

4. Estimated Return on Investment: 13-16% on gross investment and 30% on NFC. (No change from original listing)

5. Request to be Submitted: First quarter, 1968. (A change from the original estimate of fourth quarter, 1967.)

6. Timing of Expenditures:

	Revised	Original
3rd quarter, 1967	$ -	$ 15,000
4th quarter, 1967	-	73,000
1st quarter, 1968	47,000	187,000
2nd quarter, 1968	148,000	468,000
3rd quarter, 1968	343,000	652,000
4th quarter, 1968	581,000	761,000
1st quarter, 1969	754,000	618,000
2nd quarter, 1969	634,000	226,000
3rd quarter, 1969	493,000	-

DSW 182478

8/22/67

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W F Aroclor - Project Write-up

R. S. Yates - General Offices

August 8, 1967

Aroclor Expansion - CEA 1430

J. O. Bright
[redacted]
R. E. Howard
R. P. Stevens

Joe Cresce

You requested, during our review meeting of July 28, that we evaluate another expansion Case IV that would add a minimum amount of capital at Anniston with a larger capacity increase at WGK. In addition, you requested that we review the justification for the individual pieces at Anniston in Case II.

Case IV would include -

1. At Anniston

   Add new (solid Aroclor) flaker in the south end of Bldg. 27. Replace four existing storage tanks with new tanks. Make no changes to existing loading or drumming operation. Estimated cost $525,000.

2. At WGK

   Add 60 M lbs./yr. new liquid Aroclor capacity. Add five storage tanks. Estimated cost $1,975,000. The total for Case IV is $500,000 less than Case II but we cannot claim any labor savings in the drumming or reduction of tank car leasing cost at Anniston for this case.

Return on gross investment for Case IV is 15.0% compared to 15.1% for Case II. A more meaningful comparison, incremental return after taxes on new capital, with 1967 as the base year, for this case is 18.6% compared to 17.6% for Case II.

Even this is not particularly significant except to point out that Case IV is not appreciably better on a return basis. You are aware that Case IV will not provide the ability to store minimum inventories, to fill orders quickly and to segregate products which Case II provides. These pluses do not show up on ROI.

The breakdown of Case II at Anniston with justification based on information from the plant is:

DSW 182479

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1. Storage tanks, blend tanks, drumming: estimated cost $1,125,000.

   For this case a capacity increase (liquids) of 5.7 M lbs./yr. elimination of 15 tank cars (lease) and reduction of 3 men are claimed.

   Incremental return after taxes on new capital with 1967 as the base year is 11.1%.

2. New solid Aroclor flaker, new biphenyl flaker and packaging equipment for both: estimated cost $490,000.

   A capacity increase of 1 M lbs./yr. of solid Aroclor and reduction of 2 men are claimed.

   Incremental return after taxes on new capital with 1967 as the base year is 12.0%.

If you have any questions, please call.

R. S. Yates

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