PLAINTIFF'S EXHIBIT

UC-2110

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MAINTENANCE DEPT.

SPECIALTY CHEMICALS DIVISION

SOUTH CHARLESTON PLANT ENGINEERING

May 13, 1986

TO: J. R. Dement
S. Rossi

CC: W. D. Bradbury
J. E. Llana

SUBJECT: Asbestos Insulation Upgrade

Gentlemen:

The plant-wide insulation asbestos upgrade project is a high-priority safety/health program. Enclosed please find a draft of the required Outline of Project (O/P) for this major capital project that we can critically review in our next meeting.

Comments and highlights follow:

- o Project cost of $4.5MM over next three years. See basis in O/P.
- o If you want to start spending money, we can get advance through Al Walker up to $250M. Would Al approve such an advance for this project?
- o If we do a detailed scope and estimate, would require more time for O/P. Suggest we add more words in O/P to cover wide-range scope (survey).
- o Maintenance to supervise field construction. Need to develop a firm field management program.
- o Project to meet all OSHA and EPA Standards.

Sal and John, let's meet after you've had a chance to review the draft O/P.

Joseph F. Dodd

JFD/wdm
Ext. 3469
Enclosure
2301G

UCC 006456

SOUTH CHARLESTON PLANT ENGINEERING
SPECIALTY CHEMICALS DIVISION

OUTLINE OF PROJECT

SOUTH CHARLESTON PLANT

INSULATION UPGRADE

SOUTH CHARLESTON, WV

DRAFT

May 13, 1986

UCC 006457

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OUTLINE OF PROJECT

SOUTH CHARLESTON PLANT
INSULATION UPGRADE

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I. INTRODUCTION

Much of the insulation in the South Charleston Plant is asbestos and is in poor condition. The exposed asbestos presents a safety and health hazard associated with airborne particulate asbestos.

II. SUMMARY

The asbestos insulation throughout the South Charleston must be upgraded to comply with the Occupational Safety and Health Administration (OSHA) standards. The project is estimated to cost $4.5MM over a three-year period. The plan is to remove asbestos from idle equipment, replace damaged insulation with an approved type, and seal all remaining asbestos insulation.

The justification of this project is Occupational Health. The present OSHA Asbestos Standard, 1910.1001, specified two fibers/cc as the maximum allowable exposure over an eight-hour period. The figure refers to fibers greater than five micrometers in length and would amount to about 16 million fibers in that time period. Because there is no evidence in occupational studies to show that there is a threshold level below which there are no adverse effects, OSHA is pressing for a lowering of the level to 0.5 or 0.1 fibers/cc.

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III. SPONSOR'S OBJECTIVE

The basic objective of this project is to upgrade the asbestos insulation throughout the South Charleston Plant to comply with OSHA Standards.

Completion

All insulation upgrade to be complete by June 1989.

Project is high priority and must be executed on a continuous basis over the three-year period with only curtailment during the bitter cold winter month.

Safety/Health

All ~~Division~~ governmental & UCC Safety/Health Guidelines must be following during asbestos removal, repair, and covering. and disposal

Government Regulations

Plant will be in compliance with all applicable OSHA and U.S. Environmental Protection Agency (EPA) Regulations at project completion.

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IV. FACILITIES

The asbestos insulation upgrade encompasses the following units and the work schedule on a priority basis follows:

Phase 1

No. 2 Steam Plant
Portion Water Treating Unit

Phase 2 (Manufacturing Units)

Chemical Mixing	Polyols
Upper Island	Specialty Catalyst
Mainland	Specialty Chemicals
PVA Resins	Middle Island
Solvent Vinyls	Oxide Adducts

Phase 3

Complete Water Treating Unit
Utility Distribution
Distribution
Bulk Terminal
Maintenance

Some of the work has already been authorized for removing asbestos insulation from idle equipment and lines; the work is not part of this major capital project. The approved working budget projects are:

Project	Approval	Cost	Status
No. 2 Powerhouse	10/85	$111,000	On-going
Solvent Vinyl Resins	1/86	17,000	Complete
Specialty Chemicals Division Units	1/86	182,000	On-going
	Total	$310,000	

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V. ENVIRONMENTAL PROTECTION/OCCUPATIONAL HEALTH AND SAFETY CONSIDERATIONS

This project will correct an Occupational Health concern by replacing or sealing exposed asbestos insulation throughout the Plant. When the insulation is being replaced or removed, Safety and Health Guidelines will be followed which includes: installing rope barricades and clearing the area of plant personnel, posting of warning signs, proper bagging and disposal of insulation, and monitoring of surrounding work areas. In addition, assuring that contractor personnel adhere to guidelines such as: wet clean-up, wearing of appropriate respirators, wearing and disposal of proper protective clothing, etc.

This project will be in compliance with all applicable OSHA and EPA Regulations. The EPA will be notified that the removal of asbestos insulation could occur at the South Charleston Plant.

VI. SUPPORTING FACILITIES

A. Distribution

The project will have no effect on Distribution facilities.

B. Energy Systems

The project will have no effect on Energy Systems requirements. However, Energy Conservation will be improved with this insulation upgrade.

C. Safety and Environmental Considerations

See Section V above.

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VII. PROJECT PLAN

The project survey, or scope, was prepared by the Maintenance Department over the last year. The priority of work is shown in the Facilities Section on page 3.

Insulation specification consultation will be supplied by Engineering. Field construction by an outside contractor or the Central Engineering Construction Group, will be supervised by the Maintenance Department. Project Management, including cost control and reporting, will be provided by Plant Engineering. why not maint

The project organization follows:

Steering Committee

Assistant Plant Manager	S. Rossi
Maintenance Superintendent	J. R. Dement
General Project Manager	J. F. Dodd

Project Team

Maintenance Field Contractor Foreman	_____ ?
Maintenance Coordinator/Supervisor	_____ ?
Project Manager	_____

VIII. SCHEDULE

Key dates are:

Outline of Project Approval	June 1986
CBP Approval	August 1986
Mechanical Completion	June 1989

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IX. COST ESTIMATE

A. Summary

- o Construction Labor
- o Materials
- o Engineering*
- o Contingency

Total	$4,500,000

* Insulation specification consultation, project management and field coordinator of contractor.

B. Basis for Estimate

The estimate for the Phase I work is based on a detailed scope and budget pricing obtained from a local insulation contractor. The remaining work is based on an insulation survey of each operating unit and estimating the associated man-hours and materials required. The total man-hour estimate is 240,000 hours of work.

? 100,000 ?

C. Cash Flow

1986	$ 500,000
1987	$1,700,000
1988	$1,700,000
1989	$ 600,000

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X. COST ALLOCATIONS TO DIVISIONS

The program costs for Phases 1 and 3 are allocated to divisions (tenants) on 1986 usages of utilities and services (plant period cost allocations); whereas, the Phase 2 costs within the manufacturing battery limits are totally funded by the responsible tenant.

Division	Phase 1 (1) Capital	Phase 1 (1) Expense	Phase 2(2) Capital	Phase 2(2) Expense	Phase 3(1) Capital	Phase 3(1) Expense	Grand Total Capital	Grand Total Expense
Specialty Chemicals								
Industrial Chemicals				TO BE CALCULATED				
Solvents & Coatings Materials								
Totals								

Notes: 1. Allocated Host Support Project
2. Allocated directly to tenant as work is in battery limits of unit; these allocations will be shown on the Capital Expenditure Report (CER) allocated major capital.

JFD
Draft May 13, 1986
2301G

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