PLAINTIFF'S EXHIBIT

UC-2142

WV-0207 #46

UNION CARBIDE CORPORATION
SPECIALTY CHEMICALS DIVISION
ENGINEERING DEPARTMENT G. F. PAINTER

838 REMOVALS AND RETIRMENTS 838-.
JOB NUMBER NP-1020
PAGE 1 OF 4

TITLE: ASBESTOS INSULATION CONTROL - PHASE II SPECIALTY CHEMICALS DIVISION SOUTH CHARLESTON PLANT	REQUEST OR JOB NO.: 514-0471
Dept - 115010 PC - 139 5.8 - % of Alloc 121010 324 11.6 113010 351 14.8 106010 353 66.5 064010 145 1.3	SPONSOR: Specialty Chemicals DEPT: Maintenance PROJECT: JF Dodd
	BUDGET NUMBER: 85WM004
	ENDORSEMENT / APPROVAL ROUTING:
	PROJECT PRIORITY A.B.C.D.
LOCATION 514 BLDG.NO. Various	ADMINISTERED BY: ( )484(AD.CODE 1) (X)PLANT(AD.CODE 2) ( )DISTRIBUTION(AD.CODE 3)

TITLE (24 SPACES)	ACCOUNT	ORDER NO.	DATE	AUTHORIZATION
ASBESTOS INSUL CONTROL	8,3,8,1,0,0,0	0,2,3,4,0	1,1,1,2,5	$182,000

This project is to provide for the Removal of Asbestos Insulation in the following departments: Specialty Chemicals, Middle Island, Specialty Catalyst, Polyols, and Upper Island. All asbestos insulation will be removed from idle equipment and lines only to minimize the Occupational Health Risk caused by airborne asbestos fibers.

This 838 Removal Request will be administered by the Maintenance Department at South Charleston Plant while the removal work will be performed by contractors.

PRINCIPLE TYPE OF PROJECT	OCC HEALTH IMP		NPV MB	NA	-- %
AUDIT REQ.	YES ☐ NO ☑	DATE --	CAPITAL COST: RANGE±	--% CR ISSUE	--

LOCAL ENDORSEMENT		SIGNIFICANT IMPACT YES	NO	INCLUDES: AIR POLLUTION CONTROL	
				WATER POLLUTION CONTROL	
ENVIRONMENTAL	JLW		X	RESIDUE(SOLIDS)DISPOSAL	
OCC. HEALTH	CEF	X		OCC. HEALTH	
SAFETY	CEF		X	SAFETY	
ENERGY	TGS		X	NOISE CONTROL	
				TOTAL H.S.& EA	

RETIREMENT OF PROPERTY	(1)	830000	$182,000
EXPENSE (REARRANGEMENTS,REVISIONS,ETC.)	(2)	830000	--
EPE COST - TO PROFIT CENTER			
EST.CONSTR.COMP.DATE 9/30/86		TOTAL ESTIMATE @	$182,000

DISTRIBUTION OF APPROVED WORK ORDER:

R. J. ANDERSON
J. E. McKEON
W. D. BRADBURY
J. W. FOSTER (2)
G. F. HAYES
M. DWYER
J. L. SIMONS
R. G. LINK
~~G. F. PAINTER~~ → B/Harp
R. E. McELDOWNEY
J. F. DODD
G. M. ROSENGARTEN,JR(2)
A. WALKER
J. W. HANSGATE
D. H. OTT
L. C. STEWART
C. E. FRY
A. B. WILLIAMSON

DATE	APPROVALS
11-19-85	
11-22-85	
11/27/85	
12/6/85	
12/12/85	
12/13/85	
12/20/85	
12/20/85	

COST SUMMARY TO: REMcEldowney B2-712 (514)

46-1 (2/82)

UCC 006643

OBJECTIVE OF THE PROJECT

The objective of this project is to minimize hazards of airborne asbestos in the Specialty Chemicals, Middle Island, Specialty Catalyst, Polyols, and Upper Island Departments.

JUSTIFICATION

The justification of this project is Occupational Health. The present OSHA Asbestos Standards, 1910.1001, specifies two fibers/cc as the maximum allowable exposure over an 8-hour period.

This project will remove asbestos insulation from idle facilities and lines which will minimize personnel exposure to airborne asbestos.

ALTERNATIVES TO REMOVAL

Continue operations with the present asbestos insulation. Personnel may be exposed to airborne particulate asbestos.

TECHNICAL RISK

There is no technical risk associated with this project.

OCCUPATIONAL HEALTH CONSIDERATIONS

This project will correct an occupational health concern by removing asbestos insulation from idle equipment and lines only in the Specialty Chemicals, Middle Island, Specialty Catalyst, Polyols, and Upper Island Departments. Removal or replacement of asbestos insulation on equipment and lines in active service will be addressed later. When the insulation is being 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 clothing.

ENVIRONMENTAL PROTECTION CONSIDERATIONS

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

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BASIS OF ESTIMATE

This project estimate is based on man-hour forecasts made by experienced maintenance insulators/supervisors during visual inspections of idle equipment and lines throughout the plant. Labor rates were obtained from a local contractor which includes overhead and profit. The cost estimate was then developed by applying the contractor hourly rates to the man-hours obtained during the visual inspection.

PROJECT PLAN

This request is for the second of three phases for removing asbestos insulation from idle equipment and lines. This request is for the Specialty Chemicals Division and consists of the following departments: Specialty Chemicals, Middle Island, Specialty Catalyst, Polyols, and Upper Island. Other removal requests will be submitted in the future which will cover the Solutions Vinyls Department.

All work associated with this project will be performed by contractors, therefore, the costs will be controlled by obtaining competitive bids. The bids will be firm-price quotes.

Mr. P. G. West and Mr. L. B. Hewitt from maintenance will monitor the work of the contractor to assure completeness of scope and quality of work.

PROJECT TEAM

Maintenance Dept. Representative	P. G. West L. B. Hewitt

1729G

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TITLE :	REQUEST NO.:
ASBESTOS INSULATION CONTROL SPECIALTY CHEMICALS DIVISION SOUTH CHARLESTON PLANT	JOB NO.: NP-1020
	ESTIMATED BY: PG West/IL Beckett

ESTIMATE SUMMARY:

CONSTRUCTION LABOR	-	
SITE ADMINISTRATION	-	
MATERIAL	-	$143,800
ENGINEERING	-	14,400
CONTINGENCY	-	23,800
TOTAL		$182,000

EXPENDITURE FORECAST, M-DOLLARS

1Q86	2Q86	3Q86					
22.0	120.0	40.0					

5/83

CHT007

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PLANT 514
MAINTENANCE DEPARTMENT

WORK REQUEST No. NP 2178

DATA BASE CODE	DIV/LOC	INDEX
AGFCJQA	500514	60

A = FIELD ENTRY JUSTIFICATION

A1

SLANEET OR ORIGINAL W.R.	PRIO	JOB DESCRIPTION	ORIG	WORK CAT	BLDG. NO.	FLR. LVL.	TO AREA	WR	WR
00	U	REMOVE ASBESTOS FROM IDLE EQUIPMENT	PW		156		53		

A2

DATE WANTED MO DAY YR	RM RECORD NO.	EQUIPMENT IDENTIFICATION GEN. PROPERTY NO.	REQUESTED BY	C & P CODE	DATE WRITTEN MO DAY YR	SUPR. CODE	DATE COMPLETED MO DAY YR	PLANNING CODE
6 12 86			P C WEST		9 1 16 86			

A3

ENGR. CODE	EST. START DATE MO DAY YR	EST. COMP. DATE MO DAY YR	RES. CODE	ESTIMATED HOURS	RES. CODE	ESTIMATED HOURS	RES. CODE	ESTIMATED HOURS	RES. CODE	ESTIMATED HOURS	RES. CODE	ESTIMATED HOURS

R B Y B

P1

LINE NO.	TO DIV/LOC	TO ACCOUNT	TO INDEX	TO 1ST ORDER	TO 2ND ORDER	FUNCTIONAL C & V CODE	FUNCTIONAL RES.	FUNCTIONAL SUPR.	FUNCTIONAL PROJECT NO.	APPROVED BY / DATE	ASST/PLT MGR / DATE
	500511	838000	92	000023440							

JOB DESCRIPTION AND OBJECTIVE

REMOVE ASBESTOS INSULATION FROM IDLE EQUIPMENT AT BLDG 156. SEE MARK CONNORS EXT 3256 FOR LOCATION OF EQUIPMENT. THIS WORK TO BE PERFORMED BY OUTSIDE CONTRACTORS.

CHEMICAL SERVICE

SAFETY CONSIDERATIONS

VALVE & PIPING SPECS

JOB OPERATION	PRS	NO MEN	HRS	MAN HRS
OPN 1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

JOB DES | BLDG NO

STEPS (NOT) UNDER RECORD

ISSUE DATE	LOCATION	SKETCH NO.	PRI	COMP DATE

SPECIAL REQUIREMENTS

- ☐ HAZARD WK PERMIT
- ☐ MASTER TAG
- ☐ PROBOLOG
- ☐ HYDRO TEST
- ☐ NON-DEST TEST
- ☐ ENTRY REQ'D
- ☐ SCAFFOLD
- ☐ CRANE _____ TON
- ☐ CHERRY PICKER
- ☐ AIR COMP
- ☐ HELIARC WELD
- ☐ PORTABLE WELD
- ☐ BURNING RIG
- ☐ SIDE BOOM
- ☐ BACKHOE

W. R. NO. NP 2178 KEYPUNCH

FORM NO. 514-1612

UCC 006647

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