

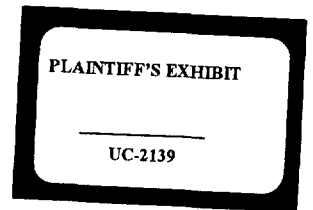
WV-0207 #37



UNION CARBIDE CORPORATION
SPECIALTY CHEMICALS DIVISION

P.O. BOX 8004 SOUTH CHARLESTON, W. VA. 25303

CONTRACT SERVICES DEPARTMENT



May 5, 1987

TO: Plant Department Heads
cc: Assistant Plant Managers
Maintenance Area Superintendents
FROM: L. B. Hewitt
SUBJECT: Asbestos Insulation Project

As you know, the plant has implemented a multi-phase project to address and correct an occupational health concern of asbestos in the work place. The initial phases of this project authorized the removal of asbestos insulation from idle equipment and lines only. A 930 WOR has been submitted to continue this effort throughout the plant. Subsequent removal, replacement and repair work will be performed in accordance with priorities and schedules based upon the "Asbestos Project Criteria" as follows:

- analytical test verification of insulation composition
- degree of insulation deterioration
- interior locations with greater exposure potential are given priority over exterior locations with low exposure potential
- consideration for scheduled or pending shutdowns
- potential for interference with other work activities
- efficient utilization of the contractor's resources

Additionally, all work associated with this project will be performed by our on-site contractor, Powerhouse Equipment Company, in compliance with all applicable federal, state, local and plant laws, regulations, policies or procedures.

In order to assist in the effective management of this project, Herb Price (x2953) has been named as the "Insulation Contract Coordinator". To insure our total compliance in this effort, Herb recently attended the "Asbestos Competent Person Training" course.

During the next few days, Herb and I will meet with each of you or your designated contact to review individual department requirements in order to develop a composite list of the plant's critical needs. Please be prepared to show Herb the areas in your organization which meet the aforementioned criteria so that we may proceed with an orderly and logical plan.

Please feel free to call me if you have any questions or concerns.

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WV-0207 #47

ASBESTOS INSULATION REMOVAL PROJECT

OBJECTIVE OF THE PROJECT

The objective of this project is to minimize hazards of airborne asbestos in the South Charleston Plant.

JUSTIFICATION

The justification for this project is Occupational Health. The present OSHA Asbestos Standards, 1910.1001, specifies 0.2 fibers/cc as the maximum allowable exposure over an 8-hour period.

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 equipment, lines and facilities. 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.

PROJECT PLAN

Initial implementation of this project authorized the removal of asbestos insulation from idle equipment and lines only, as specified in approved "838 Work Order Requests". These areas included:

- Specialty Chemicals
- Middle Island
- Polyols
- Upper Island
- Specialty Catalyst
- Solvent Vinyl Resins

Subsequent "838 and 930 WOR's" have also been approved for removal and replacement of asbestos and temporary insulation at the Oxide Adducts Unit.

The work associated with this project will be performed by outside contractors. Powerhouse Equipment Company is currently on-site performing this activity. Work priorities and schedules will be developed based on the criteria contained in the attached "Asbestos Project Criteria". A preliminary "Schedule for Asbestos Removal" is also attached which reflects individual job status. Through 1987, approximately \$147,000 has been spent on this project. Projected costs to be incurred as a result of this project scope are anticipated to run about \$5 million over the next 3 years.

In order to assist in the effective management of this project, a single individual has been assigned as the "Insulation Contract Coordinator" (Herb Price x2953). To ensure that this project is performed in accordance with the applicable laws and regulations, the Insulation Contract Coordinator recently attended the "Asbestos Competent Person Training" conducted by the National Asbestos Training Center. The attached job description reflects the initial attempt to define the activities associated with this position. During the next few weeks, Herb will meet with each department head (or designated unit contact) to review individual department requirements in order to develop a composite list of the plant's critical few.

ASBESTOS PROJECT CRITERIA

1. Analytical tests are used to identify the composition of insulation materials.
2. Work priorities and schedules are developed based upon:
 - o verification of the insulation as asbestos
 - o degree of deterioration of the insulation
 - o interior locations with greater exposure potential are given priority over exterior locations with low exposure potential
 - o scheduled or pending shutdowns are considered
 - o potential for interference with other work activities, i.e. paint program
 - o efficient utilization of the contractor resources (minimize skipping around)
3. All insulation material identified or applied under this program is clearly labeled for future reference.
4. Records are maintained documenting removal and repair activities, quantities of asbestos insulation removed, and associated costs.
5. All applicable Federal and State regulations are followed.
6. A schedule is developed projecting 30-day work activity and is updated every two weeks.

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JOB DESCRIPTION

CONTRACT COORDINATOR - INSULATOR

The following list of job activities represents the initial attempt at defining a new position in the Maintenance Department Contract Coordinator Group. This job description will be reviewed and updated as necessary no later than July 1, 1987.

1. Receives all work requests for insulation work to be done by contractors. Generally, the incumbent should receive these requests from the Area Maintenance Superintendent. This will ensure the Area Superintendent concurs with the decision to sub-contract the work and that he knows what work is being done in the area.
2. Establishes priorities for contractor usage. A schedule will be developed listing the contractor insulation work that is planned. The schedule will cover a 30-day period and will be updated every two weeks.
3. Enforces safe work practices with the contractors. Monitors contractor work for compliance with all Federal, State, and Plant Safety/Health regulations.
4. Ensures that all required testing and analysis is performed to clearly establish insulation material as being either asbestos or non-asbestos.
5. Ensures that all required personnel monitoring and area sampling is conducted.
6. Recommends/decides removal vs. repair and encapsulation.
7. Assists in developing a recommendation to enable clear identification of insulation material as to its asbestos or non-asbestos composition. This identification will apply to newly installed insulation as well as insulation which is tested and repaired. Once a method to identify is agreed upon, the incumbent ensures that identification is applied.
8. Prepares estimates as needed to aid in notification by EP personnel to Federal and State regulatory agencies.
9. Decides when special work hours are appropriate for the contractors.
10. Verifies all contractor time and material changes.
11. Ensures that valid account charges are used. Monitors and reports costs as appropriate to ensure meeting objectives.
12. Monitors contractor productivity. Takes or recommends action as appropriate.
13. Prepares and distributes periodic reports documenting progress of the Asbestos Insulation Program.

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WH Ending

Schedule For Asbestos Removal

4/17/87

	Job No.	Job Description	Starting Date	Finish Date	Man. Hours Estimated	Man. Hours Expended
complete 10/12/87 216	201281	Patch & Seal Tank 223 Asbestos		3-27-87		28
complete 10/12/87 157	193735	strip 48' $\frac{3}{4}$ " Pipe Covering Asbestos		4-10-87		
complete 10/12/87 150	203321	strip 36' $\frac{1}{2}$ " pipe Covering Asbestos		4-10-87		
complete 10/12/87 117	195337	strip 40' 2" Pipe Covering Asbestos		4-9-87		
complete 10/12/87 133	190642	strip 28' $\frac{1}{2}$ " Pipe Covering Asbestos.		4-13-87		
complete 10/12/87 Rack Bld 122	200193	Removes approx 30' double layer insulation (Exp. Loop) in Rack & Reinstitute		4-13-87		34

WK Ending

Schedule For Asbestos Removal

4/17/87

Location	Job No.	Job Description	Starting Date	Finish Date	Man Hours Estimated	Man Hours Expended
Bldg 216	193197	Reinsulate Tank 643 & 644 Bldg 1 Paint per est. 24334, scaffolding material.			760	
101	193795	Strip Asbestos in #101 6 pas 12" Flgs., 18 pas 8" Flgs 12' 1" pipe covering, 1-8" Pump.			96	
102	188681	Strip 175 L.Ft. 1" piping				
216	201306	Remove asbestos in Bldg 103 & 216 Area. 24' Lin. ft. 6' x 12" Duct, 23' 5" Conduit				
216	201307	Strip Insulation and re-insulate Tank 661 & 662 per est. 23000				
Complex 303	200151	Repair & Remove Ins. in Bldg 303. Drumming Area.		3-30-87 Worked WK Ends.		131 M.Hrs

14K end 4/17/87

Schedule For Asbestos Removal

Location	Job No.	Job Description	Starting Date	Finish Date	Man Hours Estimated	Man Hours Expended
Bldg 191	190894	Strip & seal Asbestos Hanging from lines so 191 Press Area 180 M.H. To strip & seal Insulation in Rack.			180 M.H.	
Bldg 75	199793	Remove Asbestos inside of Bldg 75 & Replace & line west of Bldg. 1172 lin ft.	4-17-87		976 To Strip 1172	
Bldg 36	201091	Strip Back 1' each way to dry Insulation & Reinsulate ETH. Outside line lower Island.			404	
N. Chas	190895	Mis. Insulation at Bulk Term. Disb. N. Chas. Approx. 500 M.H. To strip, Patch Insulation, & Insulate lines & eq.	4-13-87	5-15-87	500	
Bldg 323	198912	Remove Asbestos & Replace N.W. Corner No. 7 Dock Approx 40'	4-7-87	4-17-87	64	
Bldg 216	193196	Remove Asbestos from tank 243 & 644 & Ass. Piping. Remove from 603 & 604. 90' piping 2400 sq ft Asbestos. Approx	4-20-87	6-15-87		

Schedule For Asbestos Removal

Location	Job No.	Job Description	Starting Date	Finish Date	Man Hours Estimated	Man Hours Expended
Bldg 36	838-2401	✓ Reinsulate #4 & #5 Reactor of Piping inside enclosure 1900 sq. Ft. Reactors 1670 Lin. Ft. Piping	On Hold	on Hold	1406	4/17/87
Bldg 36	930-2030	✓ Strip #4 & #5 Reactors of Piping inside enclosure 1900 sq. Ft. Reactors 1670 Lin. Ft. Piping	3-23-87 on Hold	on Hold	2206	388.2
Bldg 109	192731	✓ Remove asbestos on 1st Flr & Replace Approx. 200' Lin Ft.	3-17-87 stripped			142.1
Bldg 156	195339	✓ Strip Asbestos on Tanks 4620, 5051, 5052, 5115, 4041 Remove ins. on piping inside of East of Bldg. 1486 sq. Ft. 1901 Lin. Ft. Piping	4-1-87	6-15-87	2552	811
Bldg 42	192730	Reinsulate Eth. Oxide Lines #42.	3- -87			88
Bldg 42	201583	✓ Asbestos Removal Bldg 42 of Tank Farms. 8.	4-1-87			21

4-17-87

Schedule For Asbestos Removal

Location	Job No.	Job Description	Starting Date	Finish Date	Man. Hours Estimated	Man. Hours Expended
Bldg 151/26 Complete	192464	strip asbestos 40' lin. 77. 4" Pipe Covering		4-10-87		
151	1994571	strip asbestos, 12' 1/2" pc. 3' 1" P.C. 4' 16" Piping			24	
west 36	201116	strip asbestos from Evaporator in field. 135 sq ft.			32	
Complete 94146	200469			4-10-87		80
196	192482					106