

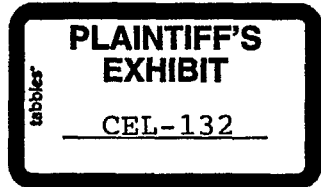


Analytical Laboratory
Asbestos Specialists

9001 Airport Blvd., Suite 105 • Houston, Texas 77061 • Bus.: (713) 944-7480 • Fax: (713) 944-3143

October 31, 1991

Mr. Noel Smith
Hoescht Celanese Chemical Group
Bay City Plant
Highway 3057
P. O. Box 509
Bay City, Texas 77404-0509



RE : Copy of Final Report

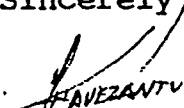
Dear Noel :

Enclose is the copy of the final report of the Demolition Project that you requested.

Once again I want to thank you for all your support during the duration of the project.

If you have any questions or if there is anything I can help you with please do not hesitate to call .

Sincerely,


Cesar G. Chavez
Sales Manager

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REPORT OF ASBESTOS AIR MONITORING
AND PROJECT SUPERVISION
for
HOECHST CELANESE CORPORATION
at
BAY CITY PLANT

Highway 3057 Bay City, Texas

October 25, 1991

CAM Environmental Services
9001 Airport Blvd., Ste 105
Houston, Texas 77061

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Asbestos Specialists

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VOLUME I

- Section A : CAM Environmental Services Personnel Certifications
- Section B : Midwest Steel Asbestos Competent Personnel Certifications
- Section C : Midwest Steel Asbestos Workers Certifications

VOLUME II

- Section A : Midwest Steel Asbestos Workers Certifications

VOLUME III

- Section A : Bulk Sample Analysis

VOLUME IV

- Section A : Air Sample Analysis
- Section B : Full Containment Readings

VOLUME V

- Section A : Asbestos Disposal Manifest
- Section B : Containment Sign in / Sign out Sheets

VOLUME VI

- Section A : Daily Project Notes

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PREFACE

On October 8, 1990, Midwest Steel, the abatement and demolition contractor, started mobilizing into the plant. The following day, Mr. Eddie Cisneros of Hoecsht Celanese and Mr. Cesar Chavez of CAM Environmental Services had a pre-project conference with Mr. Bill Parrish and Mr. Thomas Jaramillo from Midwest Steel to discuss various aspects of the project. The topics included respiratory protection and personal protective equipment, documentation from the asbestos workers, the locations of the containments, and disposal of asbestos waste materials.

Prior to beginning work on each area, Cesar Chavez of CAM Environmental conducted orientation briefings for all asbestos workers prior to any abatement activities. Workers then examined the areas and picked up all loose asbestos debris. The components within each area were inspected to verify the marked locations of asbestos containing materials to be removed. On the following pages are brief summaries of the work performed in each area.

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SUMMARY OF WORK

The services performed by CAM Environmental were broken down into two separate phases. The first phase involved taking samples from various components within the plant to determine the locations of asbestos containing materials. This information was provided to Hoechst Celanese personnel for their review (See Section 3). Upon review of the data provided, CAM Environmental Services personnel developed an asbestos abatement program for the following areas (Please refer to the attached diagram for area locations):

- 1. Area 102
- 2. Area 103
- 3. Area 104
- 4. Area 105
- 5. Area 106
- 6. Area 107
- 7. Boilers #2 and #3
- 8. Dowtherm Unit
- 9. Effluent Treatment
- 10. Water Treatment
- 11. Bagging Warehouse
- 12. Main Pipe Rack

All work was performed in accordance with Federal and State Regulations and accepted industry standards. Abatement was accomplished within full containments or using glovebags where appropriate. Workers' minimum personal protective equipment included half face respirators fitted with High Efficiency Particulate (HEPA) filters, full body coveralls, and boots. Powered Air Purifying Respirators were substituted for half face respirators for work involving full containment. Air monitoring and project oversight was performed by CAM Environmental Services personnel for the duration of the abatement activities. Visual inspections were performed and final air clearance samples were collected for each abatement location utilizing full containment prior to allowing unprotected personnel to enter the area. For areas where a full containment was not utilized, a visual inspection was used to clear the area.

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AREA 102:

The work on area 102 consisted of Pipe Insulation, Foam Glass and Mastic Removal, and Full Containment Removal. The following table summarizes the abatement activities:

<u>Dates</u>	<u>Material Abated</u>	<u>Abatement Methods</u>
12/03/90-06/03/91	Pipe Insulation	Full Containment
01/08/91-01/17/91	T-103 Insulation	Full Containment
01/21/91-02/08/91	Pipe Insulation	Glovebagging
05/06/91-06/05/91	Pipe Insulation	Partial Containment

The Pipe Insulation removed inside the full containment was located through out all the units, the glovebagging was performed on product lines within the area. The T-103 full containment was located on the south east corner of the area.

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AREA 103:

The work on area 103 consisted of transite, pipe insulation, and mastic removal. The following table summarizes the abatement activities:

<u>Dates</u>	<u>Material Abated</u>	<u>Abatement Methods</u>
11/25/90-01/24/91	Pipe Insulation	Glovebagging
12/05/90-01/08/91	Transite	Wet Methods
01/16/91-02/01/91 04/01/91-05/21/91	Foam Glass & Mastic Insulation	Partial Containment

The pipe insulation was located on steam and product lines within the area, the transite was located on the Catalyst Preparation Unit, and the foam glass and mastic was located on the towers, vessels, heat exchangers and product lines.

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AREA 104:

The work on area 104 consisted of Pipe Insulation, Foam Glass and Mastic Removal, and Full containment Removal. The following table summarizes the abatement activities:

<u>Dates</u>	<u>Material Abated</u>	<u>Abatement Methods</u>
12/10/90-02/18/91	Pipe Insulation.	Glovebagging
03/13/91-05/08/91	Pipe Insulation	Full Containment
01/31/91-03/01/91 05/13/91-05/28/91	Foam Glass & Mastic	Partial Containment

The pipe insulation removed inside the full containment was located in areas 104 and 106. The glovebagging was performed on product lines within the area, and the foam glass and mastic insulation was located on towers, vessels, heat exchangers and some product lines.

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AREA 105:

The work in Area 105 consisted of transite, pipe insulation, and mastic removal. The following table summarizes the abatement activities:

<u>Dates</u>	<u>Material Abated</u>	<u>Abatement Methods</u>
11/02/90-11/17/90	Pipe Insulation	Glovebagging
11/02/90-12/11/90	Transite	Wet Methods
11/16/90-11/20/90	Mastic	Partial Containment

The pipe insulation was located on steam and product lines within the area, the transite was located on the pump building, and the mastic was located on the tower and vessel skirts.

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AREA 106 & 107

The work on area 106 & 107 consisted of pipe insulation, transite, foam glass and mastic removal. The following table summarizes the abatement activities:

<u>Dates</u>	<u>Material Abated</u>	<u>Abatement Methods</u>
02/06/91-06/26/91	Pipe Insulation	Glovebagging
02/26/91-05/30/91	Transite	Wet Methods
02/06/91-07/10/91	Foam Glass & Mastic	Partial Containment
06/19/91-09/19/91	I Beams W/Mastic	Partial Containment and/or Wrap & Cut

The glovebagging was performed on product lines within the area, the foam glass and mastic insulation was located on towers, vessels, heat exchangers, and some product lines. The transite was located on the exterior walls and roof of the building, the I beams with mastic formed the structure of the building.

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BOILERS #2 & #3

The work on boilers #2 & #3 consisted of pipe insulation and boiler insulation removal. The following table summarizes the abatement activities:

<u>Dates</u>	<u>Material Abated</u>	<u>Abatement Methods</u>
07/01/91-07/03/91	Pipe Insulation	Glovebagging
07/24/91-08/21/91	Boiler Insulation	Full Containment

The glovebagging was performed on steam lines within the area, the full containment was built on each boiler .

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DOWTHERM UNIT:

The work on the dowtherm unit consisted of pipe insulation removal. The following table summarizes the abatement activities:

<u>Dates</u>	<u>Material Abated</u>	<u>Abatement Methods</u>
02/26/91-03/28/91	Pipe Insulation	Glovebagging

The glovebagging was perform on steam and product lines within the area.

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EFFLUENT TREATMENT:

The work on the effluent treatment consisted of pipe insulation removal. The following table summarizes the abatement activities:

<u>Dates</u>	<u>Material Abated</u>	<u>Abatement Methods</u>
03/04/91-03/04/91	Pipe Insulation	Glovebagging

The glovebagging was performed on product lines within the area.

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WATER TREATMENT:

The work on the water treatment consisted of transite removal. The following table summarizes the abatement activities:

<u>Dates</u>	<u>Material Abated</u>	<u>Abatement Methods</u>
02/12/91-02/26/91	Transite	Wet Method

The transite was located on the north, west, and south wall of the building.

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BAGGING WAREHOUSE:

The work on the bagging warehouse consisted of transite removal. The following table summarizes the abatement activities:

<u>Dates</u>	<u>Material Abated</u>	<u>Abatement Methods</u>
05/08/91-05/22/91		
06/17/91-06/26/91	Transite	Wet Method

The transite was located on the walls and roof of the building.

MAIN PIPE RACK:

The work on the main pipe rack consisted of pipe insulation. The following table summarizes the abatement activities:

<u>Dates</u>	<u>Material Abated</u>	<u>Abatement methods</u>
04/01/91-05/07/91		
05/23/91-07/02/91	Pipe Insulation	Glovebagging

The glovebagging was performed on steam and product lines within the area.