



EXXON COMPANY, U.S.A.
DEVELOPMENT OF REFINERY
AND PLANT ASBESTOS
CONTROL PROGRAMS

OCTOBER, 1974

18-0000788

002203

The Occupational Safety and Health Administration (OSHA) established a permanent asbestos standard in July, 1972. Attached is correspondence outlining Exxon Company's development of an asbestos control program which preceded the standard, but has been modified to comply with OSHA requirements.

EXHIBITS

- | | | |
|-------|----------|---|
| No. 1 | 2/16/72 | Letter - Mr. E. L. Burkett, Baytown Refinery
Recommends the Refinery discontinue use of
insulation which contains asbestos |
| No. 2 | 3/28/72 | Baytown Engineering Standards, Letter No. 72-5
Baytown Engineering Standards revised to
eliminate use of insulation materials con-
taining asbestos |
| No. 3 | 9/25/72 | Headquarters Manual, Asbestos Handling Guide-
lines for Humble-Enjay
Distributed to the field by Headquarters
Industrial Hygiene |
| No. 4 | 10/16/72 | Humble-Enjay Safety Regulations, No. 1, Baytown
Guidelines for Handling Asbestos |
| No. 5 | 11/1/72 | Minutes of OSHA Steering Committee, Baton Rouge
Action taken to eliminate purchase of
insulation containing asbestos |
| No. 6 | 1/15/73 | Letter - Headquarters Industrial Hygiene to
Headquarters Refining
Advises on status of asbestos control programs
at refineries. Also advises on need for
Headquarters Refining management to emphasize
importance of asbestos control program. |

JWH:cjw
October 31, 1974

18-0000789

002209

HUMBLE OIL & REFINING COMPANY

BAYTOWN, TEXAS 77520

REFINING DEPARTMENT
BAYTOWN REFINERYR. E. PAYNE
TECHNICAL MANAGER

February 16, 1972

POST OFFICE BOX 3950

FEDERAL EXPOSURE LIMITS OF
ASBESTOS-INSULATION MATERIALS

Mr. W. H. Schweitzer

The Refinery Hygienist, Mr. W. H. Meyer, has informed me of the Labor Department's emergency standards establishing personnel exposure limits to asbestos dust and fibers. Attached are three notegrams from Mr. Meyer dated January 5, January 19, and February 1, 1972, giving more detailed information. Because asbestos is used in many insulation materials, this is an area of concern and one in which I have an interest as author of the Baytown Engineering Standards (BTESs) covering insulation.

To date, I have reviewed the BTESs, the Refinery needs and practices, and available insulation materials. From this, I recommend that the Refinery discontinue using insulation materials that contain asbestos. Asbestos-free materials are available at no higher cost. If the following steps are carried out, the exposure of personnel to asbestos when installing new materials will be eliminated.

1. Mechanical Engineering Department

- o Remove from the BTESs those materials that contain asbestos.
(Note: I am in the process of revising these standards.
- o Instruct design personnel to specify asbestos-free materials for special jobs if standard materials are not satisfactory.

2. Maintenance and Construction Division

- o Order only those materials specified in the BTESs unless an asbestos-free material is specified for a special application.

3. Materials Department

- o Question the purchase requisitions for insulation materials that contain asbestos.

Special effort will be required by each division to break old habits. This is evidenced by the fact that 35,700 pounds of an asbestos

13-0000790

002210

CEE
JPR - 2
WHC

containing felt (equal to Johns-Manville's Firetard) was purchased in 1971 on a blanket order and installed in the Refinery even though it was removed from the BTESs approximately eight years ago. This probably resulted from replacing insulating materials in kind.

The remaining questionable areas, though minor, are the reuse of existing pipe and block insulation and demolishing insulation systems that contain asbestos. Mr. Meyer plans to do some additional work to establish the severity of exposure for each operation; for example, handling, sawing, cutting, demolishing, and the need, if any, for equipment and procedures to meet safe levels and Labor Department standards.

E. L. Burkett

18-0000791

302211

HUMBLE OIL & REFINING COMPANY

BAYTOWN, TEXAS 77520

MANUFACTURING DIVISION
BAYTOWN REFINERY

March 28, 1972

POST OFFICE BOX 3950

BAYTOWN ENGINEERING STANDARDS

To All Recipients of Baytown Engineering Standards

The following changes will bring your Baytown Engineering Manual up to date.
Insert the attached standards and remove all pages of the superseded issues.

INSERT IN MANUAL			REMOVE AND DISCARD		
Standard No.	Revision	Date	Standard No.	Revision	Date
BTES 2-52-1.1A	1	3-72	BTES 2-52-1.1A	0	11-70
BTES 2-52-1.1D	2	3-72	BTES 2-52-1.1D	1	5-71
BTES 14-1-2.1C	1	3-72	BTES 14-1-2.1C		1-71
BTES 14-1-2.5C	1	3-72	BTES 14-1-2.5C		2-71
BTES 14-2-50.1B	1	3-72	BTES 14-2-50.1B		3-71
BTAD 16-12-1	1	3-72	BTAD 16-12-1		12-70
BP 16-12-1	3	6-70	BP 16-12-1	3	6-70
BTES 19-1-1.1C	1	3-72	BTES 19-1-1.1C		5-70

GENERAL NOTES

BTES 2-52-1.1A - Figure 2 has been revised to require safety signs on tanks containing volatile hydrocarbons or tanks equipped with nitrogen or natural gas blanket systems.

BTES 2-52-1.1D - Several new safety signs were added.

BTES 14-1-2.1C, BTES 14-1-2.5C, and BTES 14-2-50.1B - These standards were revised to eliminate insulation materials containing asbestos. In light of the new Federal Safety Laws concerning personnel exposure to asbestos, there is not sufficient economic incentive for purchasing insulation materials containing asbestos.

BTAD 16-12-1 - Paragraph 9.1 of this standard was deleted to reflect acceptance of Paragraph 9.1 of the Basic Practice.

BTES 19-1-1.1C - This standard was revised to give material specification consistent with Managements' recent decision to paint onsite equipment blue instead of gray.

J. B. Tucker

13-0000792

JBT:bmc

J. B. Tucker

002212

MUNDOLE - ENJAY SAFETY REGULATIONS

The following are areas of good safety practice which are now covered by Federal regulations. Those not already in our Safety Procedures book will ultimately become part of our permanent safety rules. These should now be given special emphasis in our normal work practices.

October 16, 1972

NO. 1

GUIDELINES FOR HANDLING ASBESTOS MATERIALS

The inhalation of asbestos dust may be injurious to the health of our employees. The following guidelines should be followed to minimize this exposure when asbestos materials have to be handled. Some examples of exposure are:

- . Installation of asbestos insulation.*
- . Hand sawing or cutting asbestos insulation.**
- . Removal (rip-off) of asbestos insulation.**
- . Cleanup operations involving asbestos materials.
- . Sawing or cutting cement asbestos materials (Transite, Marinite, etc.).

The procedures to be followed when handling materials that contain asbestos are:

1. Install signs to show asbestos dust may be present. (Jobs of significant size and duration only.) These signs can be obtained from No. 1 tool room.
2. Schedule work to minimize number of people in area. All personnel whose presence is not required shall be restricted from the immediate area unless they are protected with approved single-use respirators.
3. All personnel working in the area shall wear approved single-use respirators (Symbol No. 77700-090).

These respirators shall be discarded at the end of the day or at the end of the job, whichever is the shorter period.

4. Employee should as far as practicable stand upwind from source of asbestos dust to minimize accumulation of dust on clothing.
5. Remove fibers and dust from clothing using a vacuum cleaner before removing respirators. Change coveralls as necessary.
6. Perform work in such a manner as to minimize exposure.

(a) Installation work

- 1) Precut and score asbestos, whenever possible, using band saw with

18-0000793

602213

dust collector. When possible this should be done at a location remote from other work.

- 2) Pick up broken insulation and scraps immediately and place in plastic bags. Dampen asbestos to minimize generation of dust.

(b) Removal of asbestos

- 1) Clip wiring on bands holding jacket.
- 2) Remove jacket.
- 3) Remove insulation in pieces as large as practical. Cut or break carefully to minimize dusting. When practical dampen insulation to reduce dusting.
- 4) Place all material in plastic bags (Stores Symbol No. 18103-003) for disposal. Where practical place drop cloths under work area to retain broken materials (i.e., on tower platforms, etc., where material otherwise could be spread over several levels).
- 5) Area should be cleaned up prior to lunch break and at end of shift. Dampen asbestos to minimize generation of dust.

- (c) When insulation materials are removed to do mechanical work and are replaced at end of job, use asbestos-free materials for the replacement.

- (d) Do not spray asbestos materials.

* Do not use materials containing asbestos if suitable asbestos-free materials are available. The Baytown Refinery engineering specifications and purchase specifications have been changed to specify materials that are "asbestos-free." If a nonstandard material is required for a special job, asbestos-free material should be specified on the requisition. All insulation supplied as kits such as Exomet should be assumed to be asbestos unless the kit is labeled asbestos-free.

** All existing high-temperature insulation should be assumed to be asbestos or to contain asbestos as a binder.

302214

18-0000794

MINUTES OF OSHA STEERING COMMITTEE MEETING NO. 16NOVEMBER 1, 1972

- Baton Rouge

F. S. Venable covered our current position on dealing with hazardous materials.

- Both Humble and Enjay Mechanical Divisions will instigate further action to reemphasize the problem of handling asbestos containing materials.
- Technical will contact Purchasing to get a positive statement in all contracts which will prohibit the use of high asbestos content materials.
- F. S. Venable will begin working with Mechanical to develop noise level data for certain tools.

The Committee began selecting items to be part of the sixth Humble - Enjay Safety Regulations Bulletin.

1. No loose combustible material, empty or full drums or barrels, shall be permitted within the diked area of a tank while it is in service.
2. Machine guarding shall be provided to protect the operator and other employees in the machine area from hazards such as those created by the moving point of operation, nip points, flying chips and sparks.

The remaining items needed to complete the sixth bulletin will be chosen at the next OSHA Steering Committee meeting.

RRDornier, Jr.:msn
November 15, 1972



002215

18-0000795

January 18, 1973

C. B. Moore
Hq. Refining
Room 3621

Re: Refinery Programs
for Handling Asbestos.

Charles:

In reply to your recent question.

Attached is a safe handling guide sheet from Baton Rouge Refinery. The Daytown program was given as a model in the asbestos guide. Bayway has a similar program. Billings and Benicia have less formalized programs and seem to depend more on Contractors to follow safe practices.

Bayway, Baton Rouge and Daytown supervise the Asbestos practices through the OSHA Steering Committees. Their chief concerns are that Exxon employees follow the regulations while doing small jobs in the units. These jobs might be done by insulators, mechanics, laborers and/or operators. The big jobs are generally done by Contractors. Housekeeping and disposal of the scraps are practices needing close supervision.

These refineries have been held back in the substitution of all non-asbestos insulation by not having available unlimited amounts of suitable replacements. As shown by the attached Johns-Manville Company's technical sheet, this situation is improving.

Although each location in the past has been following its own standard, the three large refineries have had the same basic policies. If either Billings or Benicia have established a safe asbestos policy we have not seen it.

If UQ Refining management were to emphasize the importance of supervisor training their employees and then enforcing the DOL regulatory practices, this would assure there should be no citation from violations.

James W. Hammond

18-0000736

JWH/ra
Attachments

002216