

## **ASBESTOS SUPPLIERS**

- **GARLOK, INC.**
  - **AUGUST 25, 1992 - WILL DISCONTINUE  
MANUFACTURE AND DISTRIBUTION OF  
ASBESTOS PRODUCTS**

**DDHA3  
11/6/89**

**ST0578036**

# **EPA ASBESTOS BAN**

## **REGULATION PROHIBITS:**

- **MANUFACTURE**
- **PROCESSING**
- **IMPORTATION**

## **TIMING:**

- **STAGED INTERVALS OVER SEVEN YEARS**
- **DISTRIBUTION IN COMMERCE STOPPED 1 YEAR  
AFTER BAN**

**DDHA2  
11/6/89**

510578037

# **EPA ASBESTOS BAN**

## **ASBESTOS GASKETS - 1993**

### **EXCLUSION - SPECIALTY INDUSTRIAL GASKETS**

- **>750 DEGREES F.**
- **CORROSIVE ENVIRONMENT**
  - **CONCENTRATED ACID, pH <2**
  - **HIGHLY OXIDIZING MINERAL ACID  
(SULFURIC, NITRIC, CHROMIC)**

**DDHA1  
11/6/89**

**\$10578038**

# **ASBESTOS GASKET PROCEDURES**

## **INSTALLATION AND REMOVAL (Gaskets Not Stuck)**

- PROTECTIVE EQUIPMENT: NONE
- SPECIAL PROCEDURES: NONE
- PROPER WASTE DISPOSAL REQUIRED

DDH①  
4/24/89

ST0578039

# **ASBESTOS GASKET PROCEDURES**

## **REMOVAL--GASKET STUCK**

### **MINIMUM REQUIREMENTS**

- **GLOVE BAGS or**
- **SMALL-SCALE, SHORT DURATION JOBS**

DDH2  
4/24/89

ST0578040

# **ASBESTOS GASKET PROCEDURES**

## **GLOVE BAG REQUIREMENTS:**

- **APPROVED RESPIRATOR**
- **GLOVE BAG**
- **HEPA VACUUM**
- **WET METHODS**
- **PROPER WASTE DISPOSAL**

**DDH3  
4/24/89**

ST0578041

# **ASBESTOS GASKET PROCEDURES**

## **SMALL-SCALE, SHORT-DURATION JOB REQUIREMENTS**

- APPROVED RESPIRATOR
- FULL-BODY PROTECTIVE CLOTHING
- HEPA VACUUM (LEV FOR TOOLS)
- WET METHODS
- PERSONNEL MONITORING
- REGULATED AREA
- MINI - OR NEGATIVE PRESSURE ENCLOSURE
- PERSONAL DECONTAMINATION
- PROPER WASTE DISPOSAL

DDH4  
4/24/89

ST0578042

## **ASBESTOS GASKET PROCEDURES**

- GASKET REMOVERS (SOLVENTS)
- ASBESTOS CREW (SHUTDOWNS)

DDH5  
4/24/89

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Slide = 1

Operations  
Dinner Program

Slide

1985 began  
including J&J  
& Jittery Direct

Add slides  
about gas program

# ASBESTOS

ST0578044

1987  
ASBESTOS HANDBOOK

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TRAINING  
DEFINITIONS  
FLOW SHEET  
DO'S & DON'TS  
ASBESTOS MATERIALS IN BUILDINGS  
MAINTENANCE PROGRAM  
NOTIFICATION  
HAZARD COMMUNICATION  
DISPOSAL  
SAFETY & AUDIT CHECKLIST  
APPROVED EQUIPMENT  
SECTION X - MINIMUM REQUIREMENTS

DDH/jrd  
6-2-88

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**ASBESTOS**

**CONSTRUCTION & GENERAL INDUSTRY**

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Permissible Exposure Limit - .2 fibers/  
(PEL) cc of air  
8-hr. TWA

Action Level - .1 fiber/cc of air  
8-hr. TWA

DDH  
7/9/86

ST0578046

**ASBESTOS  
CONSTRUCTION & GENERAL INDUSTRY**

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**REQUIREMENTS**

- Hazard communication
- Exposure monitoring
- Regulated areas
- Engineering controls & work practices
- Respiratory protection
- Protective clothing
- Hygiene facilities and practices
- Housekeeping
- Medical surveillance
- Recordkeeping

DDH  
7/9/86

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# ASBESTOS HANDBOOK MINIMUM REQUIREMENTS

- GASKETS & PACKING
  - STORAGE
  - REMOVAL
  - CUTTING
- GLOVE BAGS
- SMALL-SCALE SHORT-DURATION JOBS
- LARGE-SCALE JOBS
- AUTOMOTIVE CLUTCH & BRAKE REPAIR

DDH/jrd  
6-2-88

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# **ASBESTOS NEW DEVELOPMENTS**

- FEBRUARY 2, 1988 RULING BY U.S. COURT OF APPEALS FOR DISTRICT OF COLUMBIA
- ASBESTOS SUPPLIERS

DDH  
5/2/88

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**ASBESTOS**  
**DECISION BY U.S. COURT OF APPEALS**  
**FOR DISTRICT OF COLUMBIA**

● **OSHA MUST RECONSIDER:**

- ☐ SHORT TERM EXPOSURE LIMIT (STEL)  
(60 DAYS)
- ☐ REQUIRING SUPPLIED AIR RESPIRATOR
- ☐ SETTING LOWER PEL FOR SEGMENTS OF  
INDUSTRY THAT DEMONSTRATED COMPLIANCE  
(GENERAL INDUSTRY)
- ☐ MAKING EMPLOYERS INTRODUCE SMOKING  
CESSATION PROGRAMS FOR WORKERS
- ☐ REQUIRING BILINGUAL WARNINGS
- ☐ REQUIRING ALL CONSTRUCTION INDUSTRY  
EMPLOYERS TO FILE REPORTS TO OSHA  
BEFORE ASBESTOS WORK BEGINS
- ☐ REQUIRING A "COMPETENT PERSON" FOR ALL  
OPERATIONS

DDH  
5/2/88

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## ASBESTOS SUPPLIERS

- **TRIPLEX, INC.**

- ☐ EFFECTIVE 9/15/87 WITHDREW AS ASBESTOS SUPPLIER
- ☐ REASON: LACK OF INSURANCE LIABILITY COVERAGE

- **MARINE & PETROLEUM MFG., INC.**

- ☐ 1ST QUARTER 1989 - WILL DISCONTINUE MANUFACTURE OF ASBESTOS CONTAINING PRODUCTS

DDH  
5/2/88

ST0578051

**ELIMINATE ASBESTOS**

**GASKETS/PACKING**

DDH  
5/2/88

7008/CNLS

# **ASBESTOS**

## **CEP/CMP MAINTENANCE COST COMPARISON**

**ASBESTOS**  
**6" GARLOCK - \$1.57**

**ALTERNATE**  
**6" GYLON - \$9.50**

**DDH**  
**5/2/88**

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ASBESTOS  
CEP/CMP MAINTENANCE  
COST COMPARISON  
(20 JOBS)

**GASKETS**

GARLOCK  
\$1.57 X 20

= \$31

GYLON  
= \$10

**REMOVAL**

(LABOR & MATERIALS)

\$220/GASKET X 20 = \$4440  
\$4441

20 X 20 = \$400  
410

(DOES NOT INCLUDE TRAINING, IH MONITORING,  
MEDICAL SURVEILLANCE OF ASBESTOS  
MAINTENANCE PROGRAM COSTS)

DDH  
5/2/88

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**ASBESTOS  
CEP/CMP MAINTENANCE  
COST COMPARISON  
(20 JOBS)**

**GASKETS**

**GARLOCK**

$\$1.57 \times 20 = \$31$

**GYLON**

$\$10$

**REMOVAL**

**(LABOR & MATERIALS)**

$\$220/\text{GASKET} \times 20 = \$4440$   
 $\$4431$

$20 \times 20 = \$400$   
 $\underline{410}$

**(DOES NOT INCLUDE TRAINING, IH MONITORING,  
MEDICAL SURVEILLANCE OF ASBESTOS  
MAINTENANCE PROGRAM COSTS)**

DDH  
5/2/88

**ASBESTOS  
DIVISION COSTS WITH ASBESTOS**

**TRAINING**

484 TOTAL EMPLOYEES X \$65/MAN = \$31,500

**FUTURE LIABILITY**

= ?

**DIVISION COSTS  
WITHOUT ASBESTOS GASKETS  
AND PACKING**

**TRAINING**

24 (INSULATORS) X \$65/MAN = \$ 1,560

**FUTURE LIABILITY**

= ?

DDH  
5/2/88

1 \$10578056

# ASBESTOS DIVISION COSTS WITH ASBESTOS

## TRAINING

484 TOTAL EMPLOYEES X \$65/MAN = \$31,500  
+ 119 contractors

## FUTURE LIABILITY

= ?

# DIVISION COSTS WITHOUT ASBESTOS GASKETS AND PACKING

## TRAINING

24 (INSULATORS) X \$65/MAN = \$ 1,560

## FUTURE LIABILITY

= ?

→ ~ 10% of male population from 50-70 die of lung cancer  
— Medical records ~ 600 requests / yr.  
DDH — 2 requests into lawyers, 3 asbestos  
5/2/88 In 1984 lawyer requested all medical info  
→ for insulators.

5 workers  
Comp.

3 lawsuits pending  
(2 Dow  
1 contractor)

1 closed  
(Contractor)

asbestosis

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# ASBESTOS STANDARD IMPLEMENTATION TEXAS OPERATIONS

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## TRAINING

### GUIDELINES

#### INITIAL TRAINING

1. VIEW ASBESTOS VIDEOTAPE (LONG VERSION)
2. COMPLETE IPT MODULES

#### ANNUAL RETRAINING

1. COMPLETE IPT MODULES
2. VIEW ASBESTOS VIDEOTAPE (SHORT VERSION)

#### IPT MODULE RESOURCES:

1. TEXAS OPERATIONS' ASBESTOS HANDBOOK
2. ASBESTOS STANDARDS VIDEOTAPE
3. ADDITIONAL RESOURCES SECTION OF IPT

DDH/lr  
9/28/87

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April 12, 1989

Sonya Alexander, Michigan Division  
Ellen Sciambra, Louisiana Division  
Dominic Grandinetti, Ft. Saskatchewan  
D. J. Beebe, Eastern Division  
D. E. Wilcox, Eastern Division  
Raymond Sulin, Western Division  
Gary Bates, Sarnia  
Dick Deline, USA Operations  
John Barton, Texas Operations  
Benny Howard, Texas Operations  
Dale Bertelsman, Texas Operations  
Bill Eckert, Texas Operations  
Vernon Mack, Texas Operations  
Tom Sikes, Texas Operations

xc: Jim Andrews, Texas Operations  
Bruce Langfitt, Texas Operations  
Donna Hicks, Texas Operations

#### SECOND GASKET TASK FORCE MEETING

As promised, here is the agenda for our second meeting. This is not in concrete, so if you have any suggestions or additions, please let me know before Monday the 24th. The meeting will be held in Texas Operations at B-2403 on April 24th and 25th. We will begin the meetings at 8:00 am with coffee and donuts. We want to keep the discussions relaxed and informal... so come prepared to listen, learn, and participate.

PURPOSE: The purpose of this meeting is to communicate and exchange ideas concerning asbestos gasket/packing replacements.

OUTCOME: We want to come away with the following items:

- a. Establishment of some guidelines dealing with the gasket survey results.
- b. Creation of a procedure for approving new gasketing products for Dow specifications.
- c. Reach a general consensus of how we should proceed with the fire safe testing.
- d. Acquire a better understanding of the gasket database.
- e. Gain an awareness of Texas Operations' asbestos gasket removal and handling procedures.

Steve Shellenberger  
VAX: TXR2D2::FFRPMAT  
FAX: 409-238-2042

ST0570059

AGENDA

FIRST DAY 4/24/89

- 8:00 am Greetings and informal status reports from participating sites
- 9:00 am Break
- 9:10 am Discuss and outline steps necessary for accepting new gasket/packing materials to be placed on Dow's approved list.
- Items for possible consideration are supplier partnerships, lab and in-plant testing requirements, s\*, d, b factors, etc.
- 11:00 am Break for lunch
- 12:00 pm Discuss how we should proceed with the Gasket Survey results.
- 2:00 pm Break
- 2:10 pm Resume Gasket Survey discussion
- 4:00 pm Adjourn

SECOND DAY 4/25/89

- 8:00 am Question and answer period concerning the gasket database.
- Bruce Langfitt Programmer for gasket/packing database
- 9:00 am Break
- 9:10 am A presentation followed by a question and answer session on asbestos gasket removal procedure here in Texas Operations.
- Donna Hicks Texas Operations Industrial Hygiene
- 10:00 am Discuss proposed fire safe testing
- Vernon Mack
- 11:00 am Break for lunch
- 12:00 pm Miscellaneous discussion and assignments
- Possible topics:
- How to improve communication system
- Requiring branded materials
- View the Reflange System (possible answer to fire safe system)
- 2:00 pm Break
- 2:10 pm Resume discussion
- 4:00 pm Conclude meeting

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# ASBESTOS STANDARD IMPLEMENTATION TEXAS OPERATIONS

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## TRAINING

### GUIDELINES

#### INITIAL TRAINING

1. VIEW ASBESTOS VIDEOTAPE (LONG VERSION)
2. COMPLETE IPT MODULES

#### ANNUAL RETRAINING

1. COMPLETE IPT MODULES
2. VIEW ASBESTOS VIDEOTAPE (SHORT VERSION)

#### IPT MODULE RESOURCES:

1. TEXAS OPERATIONS' ASBESTOS HANDBOOK
2. ASBESTOS STANDARDS VIDEOTAPE
3. ADDITIONAL RESOURCES SECTION OF IPT

DDH/lr  
9/28/87

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# TEXAS OPERATIONS ASBESTOS PROGRAM

## ELIMINATE ASBESTOS GASKETS/PACKING

- GLOBAL PROGRAM
- COOPERATIVE EFFORT:
  - Technology Centers
  - Production
  - Maintenance
  - Global & Site Coordinators
- FIELD REPRESENTATIVES
- FIELD TESTS
- GLOBAL DATA BASE
- ENGINEERING SPECIFICATIONS

DDH/jrd  
6-2-88

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