PLAINTIFF'S
EXHIBIT
DUP-2333

6/28/77

ASBESTOS PROGRAM

- Sampling and monitoring
  - Barricade your work areas whenever handling asbestos
  - Perform sampling with portable battery - operated air sampler
    - Refer to Std. Practice 0-154
    - Ensure instrument is calibrated monthly to 2.0 liters/minute. See Andy Anderson
  - Sample all known and suspected asbestos areas
  - Sampling sheets have been and will continue to be supplied by the Building Mechanic Supervisor
  - Take two samples at each site
    - One is for a maximum duration of 8 hours
    - Second sample is for 15-20 minutes
  - Permissible exposure level
    - 2.0 fibers > 5 microns/cc of air
      - 8 Hour TWA
      - OSHA requirement
      - Controls may tighten to 0.5
    - 10.0 fibers > 5 microns/cc of air
      - Ceiling concentration approximately 15-20 minutes
      - OSHA requirement
      - Controls may be lowered to 5.0
    - Analysis performed by Marshall Lab
- Respiratory equipment
  - Use single-use dust respirator, 3M8710 or equal
  - Dispose of respirator after one-time use
  - Wilmington Fire & Safety Division - Occupational Health Survey Team - during week of June 27, 1977, advised of potential requirement to wear an air purifying respirator with replaceable particulate filter. Ray Calhoun will advise.
- Protective clothing
  - All Insulators shall wear coveralls, head coverings, gloves and foot coverings.
  - Clothing shall be changed daily
  - Contaminated clothing shall be sealed within impermeable bags and sent to the laundry.

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- Protective clothing (Cont.)
  - Laundry is aware of hazards but we must continue to place caution label on bag.
- Change rooms & duplicate lockers
  - A separate change room shall be provided
  - Duplicate lockers shall be provided; one for street clothes and one for work clothes
    - Lockers can be side-by-side or across from one another
- Dust collection system
  - All sawing operations will be performed in the Field Maintenance Building Mechanic Insulation Shop since it is the only location On-Plant that has a dust collection system installed.
    - System is tied to the band saw and the down draft work bench
- Housekeeping
  - No dry sweeping shall be performed
    - Air hose shall not be used as an aid in cleanup
    - All work areas shall be cleaned with vacuum cleaners
    - Clean at least daily to prevent accumulation of dust on ledges, shelves, floors and machines.
- Consumption of food, beverages, gum and tobacco
  - Food, beverages, gum, tobacco or other material placed in the mouth shall not be kept or consumed in work areas.
- Medical surveillance
  - Preplacement, within 30 days of assignment as Insulator, complete examination:
    - Medical history
    - Chest x-ray
    - Pulmonary function
    - Saliva test (OSHA future proposal)
  - Annual
    - Same as preplacement
  - Termination of employment
    - Within 30 calendar days before or after

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- Termination of employment (Cont.)
  - Same as preplacement
- Recent examination
  - Not required to take complete examination if recent exam made within past year

- Personal hygiene
  - Wash hands, face, forearms prior to drinking, eating or smoking

- Recordkeeping
  - Current requirement is to retain personnel monitoring, environmental monitoring and medical records for 20 years.
    - Proposed future OSHA requirement is to maintain record of exposure at least 40 years or duration of employment plus 20 years whichever is longer.
  - OSHA proposal on mechanical ventilation
    - Maintain for 3 years
    - Static pressure and duct velocity
  - OSHA proposal on employee training
    - Maintain for 3 years
  - OSHA proposal on rosters
    - Same retention as personnel monitoring

- Caution signs and labels
  - Sign specification

    Asbestos
    Dust hazard
    Avoid breathing dust
    Wear assigned protective equipment
    Do not remain in area unless your work requires it
    Breathing asbestos dust may be hazardous to your health

  - Label specification

    Caution
    Contains asbestos fibers
    Avoid breathing dust
    Breathing asbestos dust may cause serious bodily harm

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MEASUREMENT AND CONTROL OF ASBESTOS DUST EXPOSURE

	ADHERENCE
SAMPLING	
• Calibration of pump by Chem Lab monthly	NO
• 8 Hr. TWA/peak concentration - 15 - 30 minute sample conducted over job duration - Change cassette every 15-30 minutes	NO
EXPOSURE LEVEL	
• 2.0 fibers > 5 microns/cc of air for 8 hr. TWA	NO
• 10.0 fibers > 5 microns/cc of air for 15 minute period.	NO
RESPIRATORY EQUIPMENT	
• Single use, 3M 8710.	YES
• Air purifying w/replaceable particulate filter	NO
PROTECTIVE CLOTHING	
• Coveralls	
- Worn whenever handling asbestos	YES
- Change daily	NO
- Seal contaminated clothing in plastic bag for laundry - place caution label	YES
- Remove only in authorized change rooms	NO
CHANGE ROOMS	
• Separate Room	
- From other crafts	NO
• Duplicate lockers	YES
• Shower facilities	
- Adjacent to locker room	NO
PERSONAL HYGIENE	
• Wash portions of body prior to drinking - eating - smoking	NO
- Hands - Face - Forearms	

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	ADHERENCE
COLLECTION SYSTEM	
• Band saw and downdraft table residue collected	YES
• All hand cutting accomplished in Fabrication Shop	YES
HOUSEKEEPING	
• Use vacuum system	YES
- No dry sweeping	YES
- No compressed air	YES
CONSUMPTION OF FOOD OR RELATED MATERIAL	
• Following items placed in mouth shall not be kept or consumed in the Work Area	NO
- Food	
- Beverages	
- Gum	
- Tobacco	
- Other	
RECORD KEEPING	
• Field Maintenance retains records for 20 years	
- Personnel Monitoring	YES
- Environmental	NO
• Medical record retention for 20 years	YES
• Demolition/renovation report to EPA	NO
WORK AREA	
• Barricade	YES
• Post caution signs	YES
MEDICAL EXAMINATION	
• At time of placement as building mechanic	YES
• Annual	YES
• Termination of employment	YES

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