

PROTOCOL FOR MEDICAL SURVEILLANCE OF EMPLOYEES ASSIGNED TO
THE LAKE CHARLES DERIVATIVE AREA

PURPOSE

PPG Industries' policy is to protect the health and well being of its employees and to be in compliance with all applicable laws, standards, rules and regulations as outlined in the Blueprint. These guidelines are provided for the Lake Charles physicians assessing employees assigned to work in the Derivative Area of that plant. These guidelines are meant to assist the Lake Charles plant physician in implementing the policy. PPG physicians will continue to exercise their clinical judgements and are encouraged to consult with the PPG Corporate Medical Director.

EMPLOYEES INCLUDED

Employees assigned, or with the potential for assignment (shipping and operations employees and maintenance employees) to the Derivative Area, will participate in the Lake Charles "Derivative" medical surveillance program.

EXAMINATION FREQUENCY

Examinations will be given prior to assignment in the Derivatives Area, and at least annually thereafter. Employees who have worked in the area for ten (10) years or longer will have semi-annual examinations (containing the elements in the following section titled SCOPE OF EXAMINATIONS) done in addition to their annual examinations. Employees who are covered must be followed under the corporate Health Care Policy until applicable latency periods have expired.

SCOPE OF EXAMINATIONS

The annual examinations include the following elements from the OSHA Vinyl Chloride Standard (29 CFR 1910.1017):

1. A general physical examination shall be performed, with specific attention to detecting enlargement of liver, spleen or kidneys, or dysfunction in these organs, and for abnormalities in the skin, connective tissue and the pulmonary system,
2. Blood chemistries (see those listed under section titled BLOOD CHEMISTRY PROGRAM),
3. Medical and Work History (see those listed under section titled MEDICAL AND WORK HISTORY).

The examinations provided semiannually to those employees

with ten (10) or more years of possible exposure to vinyl chloride include the following:

1. Blood chemistries (see those listed under section titled BLOOD CHEMISTRY PROGRAM),
2. A clinical examination that includes a stethoscope examination of the heart and lungs,
3. Palpation of the abdomen and back for abnormalities of liver, spleen and kidneys.
4. Examination of the skin.

BLOOD CHEMISTRY PROGRAM

1. Fasting blood chemistries will be drawn for all examinations per the above criteria. These chemistries must include those mandated by the OSHA Vinyl Chloride Standard. These are:

Total Bilirubin
Alkaline Phosphatase
Aspartate Aminotransferase (AST or SGOT)
Alanine Aminotransferase (ALT or SGPT)
Gamma-Glutamyl Transpeptidase (GGTP)

In addition to these, a triglyceride and cholesterol analysis must also be performed.

2. If any of the screening tests are abnormal (by the limits of the laboratory performing the analysis), a second sample should be obtained within four weeks. If this is normal, an additional confirming sample must be obtained in not less than four nor more than 12 weeks following the first (normal sample).

3. If the analysis of the second sample yields more than one blood chemistry as abnormal (especially if an increasing trend is noted in a test result), or if there is an isolated result that is greater than 2.0 times normal, consideration should be given to restricting the individual from the Derivatives Area. Additional tests which may be useful are included in Appendix A of the OSHA Vinyl Chloride Standard. The blood chemistries are primary screening tests performed to detect abnormal liver function; however, they are not specific for liver disease and the examining physician must therefore evaluate each employee on an individual basis. If the plant physician feels the need clinically for a second opinion to help arrive at a decision on restriction, a gastroenterologist (who is knowledgeable of the OSHA Vinyl Chloride Standard) should be consulted.

MEDICAL and WORK HISTORY

An employee medical and work history must be taken and kept current. The medical history taken shall include those topics identified by the OSHA Vinyl Chloride Standard:

1. alcohol intake;

2. past history of hepatitis
3. work history and past exposure to hepatotoxic agents, including drugs and chemicals;
4. past history of blood transfusions;
5. past history of hospitalization.

In addition, information as to exposure to hepatotoxins can be obtained from the current industrial hygiene air monitoring data base for the job assigned the employee.

RISK FACTORS

The physician and his staff will work with each employee on an individual basis to determine and suggest modifications to reduce any risk factors which could be causing or contributing to abnormal blood chemistry results.

WORK RESTRICTIONS

An employee must be restricted from the Derivatives Area whenever the examination reveals clinical findings that, coupled with abnormal blood chemistries, indicate a medical condition which could place the employee at risk. Employees at risk will remain restricted and followed until the condition returns to normal or until the etiology of the condition has been possibly identified and documented.

SPECIAL AIR MONITORING REQUIREMENT

1. Employees with abnormal blood chemistries will have personal monitoring performed weekly as long as the employee remains in the Derivative Area.
2. A current exposure profile for each job and a copy of the employees individual monitoring results shall be maintained in the medical records for review by the plant physician.

Date August 10, 1987

Signature

Carl B. Myers, M.D.

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