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BENEFITS OF INDUSTRIAL HYGIENE

Union and labor interest in fields of health and fringe benefits necessitate good liaison with official agencies. These agencies are state department of health, of labor, compensation boards and other regulatory groups. One must be prepared to compare data for work areas in plants with their *findings*.

Often, we find it possible to be of service to the Sales Department in preparing precautionary labels as to safe use of petroleum products. Other fields of service may be to customers concerning the safe use of petroleum products in their plants.

This field is not static; it is dynamic and, therefore, it is necessary to keep in contact with others in this field by participation in professional activities. Industrial hygiene activities extend the medical services out of the clinic into the industrial plant. It provides a mutual contact between the engineering and maintenance group in the field and the physician.

CONCLUSION

Summarizing some of the benefits that arise from an active and constructive industrial hygiene program, it provides facts regarding working environment; prevents or reduces to a minimum occupational diseases; reduces compensation costs; demonstrates company interest in health and welfare; permits control of hazards before injury is done to employees; assists Medical Departments in protecting employee health; serves as clinical diagnostic aid; reduces lost time due to illness; reduces employee illness costs; and provides most effective and economical control of hazards.

Industrial hygiene is a natural evolution in the enlightened, resourceful industrial world. It is another practical tool of science used to increase the efficiency, lower the cost and maintain higher standards of living in our free enterprise system. Today, management recognizes that no longer is manpower cheap. Slight losses in efficiency are important.

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INDUSTRIAL HYGIENE IN THE PETROLEUM INDUSTRY

INTRODUCTION

Modern public health techniques have allowed the present world to build congested industrial, business and residential centers. The secret of this development lies in our control of communicable diseases. Benefits from control of the environment are obvious to everyone living in a modern community, where our food and water supply, waste disposal, insect vector control and general sanitation are guided by public health principles.

Control of communicable diseases in modern industrial communities has given rise to a new standard of living in our homes. It has been said that there is no better yardstick to gauge the culture of a community than that of basic sanitation. Today, we have large groups of people working closely together in modern plants where efficiency and production are greatly accelerated because we have these controls. Communicable diseases have been brought under control by a combination of medical and engineering practices. Generally, isolation, vaccination, protection of food and water supplies, and limitation of contacts and transmittal by insect vectors have been the winning approaches.

Occupational diseases are also controlled by the application of present day scientific knowledge. The practice of this science is called industrial hygiene and industrial medicine. This field has many facets, therefore requires the application of several branches of basic sciences, as does the control of infectious diseases. Industrial hygiene has multiple dividends to offer industry, the same as environmental sanitation has multiple rewards.

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2 Specifically, we also have sanitation for esthetic reasons. The pleasure we derive from boating and fishing on our rivers and from our beaches and parks, is an example of the worth of suitable conditions in recreational areas. Also, for esthetic reasons, we build our washrooms and toilets in modern refineries as attractive structures, using tile and other suitable materials for easy cleaning and pleasing appearance.

<u>DEPARTMENT</u>	<u>MATERIAL</u>	<u>UNIT OR PROCESS</u>	<u>DEGREE OF HAZARD</u>	
Refining	Lead	Painting	Severe	
		Doctoring	Moderate	
		Welding and Burning	Severe	
		Gasoline finishing (TEL)	Severe	
	Mercury	Laboratory	Moderate	
		Meter and Instrument Shop	Moderate	
		Pilot Plant	Severe	
	Benzene	Hydroformer	Slight	
		Laboratory	Moderate	
	Dust (silica)	De-waxing	Severe	
Production		Lube oil	Moderate	
		Reclamation	Moderate	
		Contact treater	Moderate	
		Electrical	Severe	
Mercury	Meter	Moderate		
	Geological	Severe		
	Gas testing	Moderate		
	Painting	Moderate		
Lead	Camp site	Moderate		
Insecticides	Paraffin removal	Moderate		
Benzene	Core analyses	Severe		
Carbon Tetrachloride	Field maintenance	Moderate		
Herbicides	Drilling	Moderate		
Noise	Drilling	Moderate		
Solvents (petroleum)				
Pipe Line	Hydrogen Sulfide	Pump Station	Moderate	
		Gauging	Severe	
	Carbon Monoxide Solvent vapors Degreasing solvents Bitumastic coating	Pump Station	Moderate	
		Pump Station	Moderate	
		Maintenance	Moderate	
		Pipe doping and painting	Moderate	
Exploration	Carbon Tetrachloride	Core Analyses	Severe	
	Mercury	Core Analyses	Severe	
	Benzene	Cable Shop	Severe	
	Fluorinated plastics	Electrical	Moderate	
Law	Crude oil	Claim	Slight	
	Industrial waste	Claim	Slight	
	Air Pollution	Claim	Moderate	
Research and Development	Mercury	Reservoir Laboratory	Severe	
	Carbon Disulfide	Laboratory	Severe	
	Nickel Carbonyl	Catalyst	Severe	
	Radiation agents	Reagents	Moderate	
Sales	Cutting oils	Customer Shops	Moderate	
	Solvents	Customer Shops	Moderate	
	Lead Oxide	Paint Plant	Severe	

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SUMMARY

In the broad sense, any program of environmental health or industrial hygiene is one of preventive medicine. For many occupational diseases there is no satisfactory medication; the only method of control lies in prevention. There are certain medical and engineering principles which can be applied to the working environment to enable an industry to locate and eliminate working conditions which are likely to cause illness, lower production, and the like. Modern industry, especially the petroleum industry, accepts the responsibility for the health of the worker while he is on the job, and it is willing to institute the necessary steps for adequate health maintenance. It needs to be guided in the approach to this goal.

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