

MANAGEMENT ASPECTS

- 815 Organizational Health and Executive Development. C. Argyris.
Advanced Management 24, 8 (Dec. 1959).

The author is concerned with the fact that executives place emphasis on end-products such as high morale, loyalty, and interest in the company rather than on organizational processes. According to his research, high loyalty and high productivity are partially caused by the fact the employees are permitted to be non-involved and experience few contacts with management. He makes a plea for the process of increasing the healthy development of the total organization and says that it is a sick organization which would create the "organization man". It is argued that a healthy organization would stress individuality. In order to initiate the process toward organizational health, several steps are involved: first, to define what is to be included in the concept of organizational health; second, to translate this concept into actual behavior; third, to develop criteria to measure and evaluate the state of organizational health; and fourth, to apply these criteria to an executive development program or to other programs to see if they are contributing to organizational health. It is argued that changes may need to be made in the organizational structure, managerial controls, and leadership patterns, but it is also admitted that no concrete recommendations can be made in these areas at this time. It is further asserted that effective leadership is no different from effective living. Hence, the healthy leader grows and develops his own potentialities in such a way as to encourage relationships with others so that the process of growth and development takes place for all in the organization. Looking to the future, it is contended that personnel departments will be concerned with developing quality leadership and healthy organizations through the functions of research and training.

-- Cond. from J. Occ. Med.

- 816 Automation and Unemployment. W. Phelan.
Illinois Labor Bull. 20, 14-15 (June 1960).

For decades industry has been highly mechanized but humans regulated the machines and controlled the input of variables. Today, machinery, which can control other machinery and regulate the input relationship of many variables, is available. The application of this new machinery in industry is called automation. Automation is primarily applicable in manufacturing, communication, and transportation industries, and in data processing (paperwork). If purchasing power can be maintained and at the same time automation is widely used, society as a whole is economically ahead. Automation produces goods cheaper in two ways. First of all, production costs are reduced. Labor, material, and indirect factors, as material handling are all utilized more efficiently. Secondly, the production of surplus is eliminated. Automation of data processing systems enables management to receive daily or weekly inventory reports from all sectors of the distribution channels. Hence, when the retail inventories of a particular item are growing too large, the manufacturer realizes this situation in days instead of months. Therefore, production will be immediately shifted to a more needed item. With automation productive capacity increases, and more goods and services can be produced and distributed. However, through the increase in productive capacity by application of automation, the right of those who may have become unemployed through the application of automation must not be ignored. In a few industries, automation may come abruptly. Nevertheless, the situation may be only temporary and as soon as the individual has adjusted to the circumstances, he will realize that he must shift to growing industries. During the transition period, he will get unemployment compensation, which in the State of Illinois is now \$50 a week for a possible 26 weeks. Older workers who would find it difficult to switch to new industries usually will be kept in the present industry and used as a skeleton work force.

03120612

ACCIDENTS AND PREVENTION

- 817 A Power Plant Safety Program. W. C. Kramer
Coal Utilization 14, 21-22 (June 1960).

The prime requisite for a successful safety program is the enlistment of full cooperation from all plant employees. The author presents a program which does not use incentives or rewards and still has been highly successful. Before a safety program can get off the ground, the principles and objectives must be spelled out. The following could be called to a company's safety philosophy: (1) Every employee has a responsibility for safety. (2) Safety is an integral part of doing a job right and is made a vital part of all job training. (3) No job is so urgent or emergency so great that it cannot be taken care of safely. (4) Top management must be sincere and active in their pursuit of safety if such an attitude is to prevail. When this attitude reaches and is accepted by first line supervisors, the safety program works because employees adopt the attitude of those for whom they work. (5) Safety on the job and off the job are equally important. A proper attitude toward safety is a way of life.

- 818 Understanding the Electron. J. G. Huffman.
Natl. Safety News 82, 38-39, 171-172 (July 1960).

Last year in the United States about 1,000 persons met death by accidental electrocution; another 5,000 received serious injury from electrical causes. Property damage ran into millions. Electron flow or movement along a conductor is called an electric current. A rate of 6×10^{18} electrons per second is equivalent to one ampere. When current flows, it releases energy. An electrical current of only 25/1000 ampere passing through the human body can be lethal. Fortunately, it usually requires considerably more, especially when the current path does not cross the heart or important nerve centers. Even though not lethal, serious burns can result where higher currents are involved. Three things are necessary for sufficient current to pass through the human body to be dangerous. First, the circuit has to be complete. The current must have points of contact where it can enter and leave the body. The second condition is that the voltage must be high enough to cause a large enough current to flow. Finally, the source must have the capacity to supply the current, whatever the voltage. The commonest situation which can provide the three necessary conditions for serious shock is contact with an ungrounded portable device, such as a hotplate, a stirrer, or a pH meter. These devices often develop an electrical path between the internal wiring and the frame. If this path is a metallic one, it's called a short; if it's due to dirt or a breakdown of insulation, it's called a leak. In either case, the frame of the device would be hot electrically to ground. This hazard can be almost completely eliminated by the use of a 3-wire receptacle, plug, and cable. Heating tapes with thin porous insulation represent a class of potentially hazardous devices which cannot be made safe easily. Leakage sometimes exists from the heating wire in the tape through the insulation to the surface. It can be due to the insulation being worn thin or to some conducting material having soaked into it. There is no metal frame to ground, so a third wire is of no value. Other precautions to be observed in handling electrical equipment in the laboratory are discussed by the author.

03120613

MISCELLANEOUS

- 819 Industrial Waste Disposal Tailored to Stream Flow. C. J. Velz. Proc. Am. Soc. Civil Engrs., J. Sanitary Engr. Div. 85, No. SA6, Pt. 1, 95-109 (Nov. 1959).

Recognizing the technical and economic limitations of waste treatment in maintaining satisfactory stream conditions during drought season, two possibilities for more efficient utilization of water resources hold promise. Either the stream flow should be regulated to make a higher level of total flow useable; or the industrial waste discharge should be regulated, tailored to the varying pattern of stream flow. A detailed case analysis of the latter, regulating release from waste storage lagoons in accord with the varying waste assimilation capacity of the stream, indicates industrial expansion potential 10 to 50 times that possible under drought flow conditions. -- Public Health Engr. Absts.

- 820 Treatment of Phenolic Effluents. D. A. Hall and G. R. Nellist. J. Appl. Chem. (London) 9, 565-576 (Nov. 1959).

The following methods of disposal and treatment of phenolic liquors from coke oven plants are studied: (1) Direct use on froth flotation media in coal washing plant. The coal absorbs 60% of the phenols present, but only half the normal output can be used in this way. (2) Chemical oxidation of the phenols by ozone. This is satisfactory for dilute liquors (100 ppm of phenols) but is too costly for spent ammoniacal liquors. (3) Biological oxidation. The activated sludge process is satisfactory but somewhat expensive. An enclosed percolating filter containing coke activated with soil organisms gave promising results. (4) Extraction of phenols. The use of light creosote oil in a rotating disc extractor gave promising results. For liquors rich in phenols, the procedure recommended is method (4) followed by methods (3) or (1) and then method (2) if desirable. Final effluents with 10 to 50 ppm of phenols can be obtained. -- Public Health Engr. Absts.

03120614

IN RE: ABRAMS November 1992

HWBB-0018635

INDEX

<u>Accident facts (bk. rev.)</u>	730	<u>Cancer (continued)</u>	
<u>Air pollutants</u>		pathological effects of smoking	736
adhesion to surfaces	810	roasted chromite ore	756
determining	812	<u>Carbon monoxide poisoning</u>	
effect on epithelium	813	neurologic manifestations	753
release of sodium aerosol in combustion	814	<u>Carbon tetrachloride</u>	
sulfur dioxide, hydrogen sulfide,		effect on rat serum enzymes	762
carbon disulfide	803	<u>Cement industry, allergy in workers</u>	748
<u>Air pollution</u>		<u>Chemotherapy of infection</u>	738
control		<u>Chromate</u>	
Allegheny County	728	cancer in mice and rats	757
dust and fume disposal	807	dermatitis from cement	747
in vertical boiler	806	<u>Chromatography, some aspects of</u>	801
measurement(s)		<u>Chromite ore, role in cancer</u>	756
chamber for calibration purposes	811	<u>Chromium, microdetermination</u>	759
<u>Air sampling, ring oven techniques</u>	802	<u>O-Cresyl phosphate, outbreak of paralysis</u>	765
<u>Allegheny County, air pollution control</u>	728	<u>DDT, toxic hazards</u>	767
<u>Allergy(ies)</u>		<u>Dermatitis, dermatosis(es)</u>	
analysis of allergic dermatitides	741	analysis of dermatitides	741
in antimony mine	749	in cement industry	747
in cement industry	748	formaldehyde in textiles	744
<u>Anthraxis, bone marrow</u>	783	phenylmercuric salts	742
<u>Antimony mine, allergic disease in</u>	749	silica granulomas in man	743
<u>Asbestosis, and lung cancer</u>	781	status of skin tests	746
<u>Asthma, effect of smoking</u>	734	value of patch tests	745
<u>Atomic energy</u>		<u>Diatomaceous earth, pneumoconiosis</u>	775
available literature	790	<u>1,1-Dimethylhydrazine, toxicity</u>	766
plant, dispensary visits	800	<u>Dust control, suppression</u>	
<u>Automation and unemployment</u>	816	in glass manufacturing	774
<u>Baritosis, in barite workers</u>	768	<u>Dust counting, determination</u>	
<u>Benzene hexachloride, toxic hazards</u>	767	size distribution in coal mines	805
<u>Books</u>		statistical aspects	772
accident facts	730	<u>Dust sampling, samplers</u>	
health benefit coverage in New York State	732	correction for anisokinetic	771
health survey, U.S. Natl., Hawaii	733	mycological contamination	769
occupational disease attributed to		size analysis	773
pesticides	731	<u>Electrical hazards</u>	
<u>Boranes (boron hydrides)</u>		in the laboratory	818
toxicity of diborane	751	<u>Emphysema, effect of smoking</u>	734
toxicology	752	<u>Ethylene dibromide</u>	
<u>Cancer</u>		fatal case of poisoning	763
and air pollutants	813		
from chromates	757		
lung, asbestos	781		

<u>Executive development and organizational health</u>	815	<u>Radar</u>	
		effects on animals	792
<u>Eye, tobacco amblyopia</u>	735	control of hazards	791
<u>Fluoride(s), determination</u>	754	<u>Radiation (ionizing, nuclear, x-rays, etc.)</u>	
<u>Formaldehyde and contact eczema</u>	744	biochemical effects	798
<u>Health</u>		in manned space flights	784
benefit coverage in New York State survey, U. S. Natl.	732	effect on mediastinum	793
Hawaii health survey	733	protection, code, New York City	729
<u>Heart disease and occupational exposures</u>	739	<u>Radioactive</u>	
<u>Heat</u>		decontamination of animals	799
development of heat pyrexia	785	particulates, retention in lung	794
and humidity, diffusion of water vapor through skin	786	<u>Radioisotopes</u>	
<u>Industrial medicine</u>		information for industrial use	795
in atomic energy plant	800	and the law	796
education for practice of	740	in medicine	797
<u>Industrial relations and organizational health</u>	815	<u>Resins, toxicology of synthetic</u>	750
<u>Infection and chemotherapy</u>	738	<u>Safety in a power plant</u>	817
<u>Lead</u>		<u>Silica granulomas in man</u>	743
fume from welding coated steels	760	<u>Silicone(s)</u>	
poisoning in making light bulbs	761	polydimethylsiloxanes, toxicity	764
<u>Man versus environment</u>	808	<u>Silicosis</u>	
<u>Mercury</u>		clinico-radiological assessment	778
hazard in medical laboratories	758	non-typical forms	777
<u>Noise</u>		unusual manifestations	776
audience and seat absorption	787	<u>Silicotuberculosis</u>	
measurement(s)		bronchographic picture	780
temporary threshold shift	788	bronchoscopic picture	779
<u>Noise control and reduction</u>		<u>Skin, diffusion of water vapor through</u>	786
value of ear defenders	789	<u>Smoking</u>	
<u>Odor control methods</u>	809	effect on asthma and emphysema	734
<u>Ophthalmology, tobacco amblyopia</u>	735	pathological effects	736
<u>Pesticides</u>		<u>Space flight, radiation implications</u>	784
and occupational disease (bk. rev.)	731	<u>Sulfur dioxide</u>	
<u>Phenylmercuric salts, dermatoses</u>	742	determination in flue gases	804
<u>Plastics, toxicology</u>	750	dynamics of inhalation	755
<u>Pneumoconiosis</u>		in urban area	803
baritosis	768	<u>Sulfur trioxide, determination in flue gases</u>	804
in diatomaceous earth workers	775	<u>Talc pneumoconiosis, in soapstone workers</u>	782
talc in soapstone workers	782	<u>Thermal precipitator</u>	
<u>Polydimethylsiloxanes, oral toxicity</u>	764	fractionation of particles	770
		<u>Uranium dioxide, retention in the lung</u>	794
		<u>Vibrating tools</u>	
		and neurological conditions	737
		<u>Waste disposal</u>	
		tailored to stream flow	819
		treatment of phenolic effluents	820

03120616

HW88-0018637