

- 907 Second Look at Safety. R. T. H. Wiffin. Grinding & Finishing 11, 38-40 (Oct. 1965).

This paper describes the nature of the grinding wheel; the power and speed, what the grinding machine and grinding wheel manufacturers and operators and their employers must do to assure the safe use of grinding wheels; some important features which must be constantly checked on machine equipment are also discussed. -- J. Am. Soc. Safety Eng. Absts. (modified)

- 908 How to Improve Grinding Wheel Safety. R. T. H. Wiffin. Machinery, N. Y. 72, 77-80 (Dec. 1965).

The author discusses why grinding wheels break; the effect of wheel hole size and three basic reasons why large-hole grinding wheels require much more care in mounting than small-hole wheels; breakage is minimized by correct wheel mounting; the importance of wheel-hole tolerances is stressed; procedures are recommended for establishing regular inspection program to minimize the breakage of grinding wheels. -- J. Am. Soc. Safety Eng. Absts. (modified)

COMMUNITY AIR HYGIENE

- 909 The Air Resource Management Concept. A. N. Heller, J. J. Schueneman, and J. D. Williams. J. Air Poll. Control Assn. 16, 307-309 (June, 1966).

The air resource management concept is an operating principle, feasible in an age of science, that is needed because of the complexities of our communities. This concept is dedicated to obtaining the highest beneficial use of the limited air resource in which we live and work; thus, the optimum degree of air purity for the promotion of the public health and the adequate protection of the welfare and property of the people is assured. This concept also provides a base for organization of tasks so that program directors can perform them with system, purpose, understanding, and a reasonable probability of accomplishment. It endeavors to develop a point of view to identify approaches for finding what should be done, and to describe how to go about doing it. In this way it is hoped that the steps required to achieve and maintain desired air quality for the nation will be taken expeditiously and in an equitable manner. -- Authors' conclusion

- 910 An Air Quality Study in the Vicinity of Lewiston, Idaho, and Clarkston, Washington. D. F. Adams and R. K. Koppe. J. Air Poll. Control Assn. 16, 314-316 (June, 1966).

Average suspended particulate values in downtown Lewiston and Clarkston were approximately 1.6 times above the average suspended particulate loadings in a complex of commercial-industrial-suburban activity of North Lewiston. At the same time the hydrogen sulfide values were usually higher in North Lewiston than at the downtown sites. Dustfall ranged from 7.4 to 315.4 tons/sq. mile per month above background. Distribution of the dustfall components indicated a multiplicity of dust sources, including high background levels attributed to airborne soil particles from adjacent farm land. The heavy dustfall in the downtown commercial areas of Lewiston and Clarkston contained a high percentage of self-generated material not related to a specific industrial source. Conversely, greater quantities of sodium and sulfate were found in the North Lewiston dustfall than elsewhere and were probably related to pulp production. Substantially higher levels of suspended particulates and dustfall (loss on ignition fraction) were found during the heating season. The lead peroxide candle "sulfation" rate showed that a significant part of the sulfur content of the air came from multiple community sources including comfort heating, vehicular travel, and waste disposal. Two weather conditions were associated with increased ground-level concentration of pollutants—low-level nocturnal inversions and synoptic, stagnating air masses. Increased air stagnation also contributed to the higher gaseous and particulate levels during the heating season. -- Cond. from authors' summary

- 911 Characterization and Estimation of n-Alkanes in Airborne Particulates. S. P. McPherson, E. Sawicki, and F. T. Fox. J. Gas Chromatog. 4, 156-159 (April, 1966).

The materials and methods for the collection of airborne particulates, extraction and benzene-soluble fractions from the particulates, and separation of aliphatic fractions from these benzene-solubles have been described. A system for the characterization and analysis of atmospheric n-alkanes, C_{15} to C_{28} is presented. Several atmospheric samples obtained from Nashville were analyzed for these compounds. Their importance is derived from their reported co-carcinogenicity. The carcinogenic activity of polycyclic hydrocarbons in the atmosphere may be enhanced by the presence of airborne n-alkanes, and such relations have been drawn for tobacco smoke. -- APCA Absts.

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