Item ID Number	03951	☐ **Not Scanned**
Author	Klinestiver, L.	
Corporate Author	United States Air Force School of Aerospace Medicine,	
Report/Article Title	Bibliography on Lead, [1977?]	
Journal/Book Title		
Year	0000	
Month/Day		
Color	☐	
Number of Images	25	
Descripton Notes	Also includes 1) letter from Alvin L. Young to Capt R. Gaesor regarding lead bibliography, analysis of samples, date 25 August 1977, and 2) an report on copper toxicity. Report not scanned.	

10D

FILE/Capt Young/thr/25 Aug 77

VT 25 Aug 77

Lead Bibliography, Analysis of Samples

USAFA/DFCBS-R (Capt R. Gaesor)
USAF Academy CO 80840

26 Aug 77

1. The attached bibliography on lead was prepared by Lt Col Larry Klinestiver, USAFSAM/VNE, Brooks AFB TX, in support of a Ph.D. program with Colorado State University. With his concurrence, use it as you wish. I've also attached an article on copper toxicity for your information.

2. The 2 Aug 77 letter from Lt Col Sampson, DFCBS-R, requesting analytical support for your non-potable irrigation study has been received by Maj Lefebvre. We discussed your requirements as outlined in the letter. Although we believe this project is of importance to the Air Force, the magnitude of the requested support requires more manpower than we have available. The analyses of 90 biological or soil samples per month require extensive manpower, instrumentation and supplies. We would recommend that you reevaluate your requirements. We will make every effort to support you with an analytical program of 30-40 samples per month. If this is agreeable with you, please notify us as soon as possible. We will coordinate the appropriate requirements with the McClellan Laboratory.

SIGNED

ALVIN L. YOUNG, Capt, USAF, Ph.D.
Chemist/Biologist Consultant

2 Atch
1. Lead Bibliography
2. Copper Toxicity

Cy to: USAF OEHL (Maj Lefebvre)

Bibliography on LEAD
Prepared by L. Klinestiver
USAFSAM/VNE
Brooks AFB, TX 78235

BIBLIOGRAPHY

ABERNETHY, R. F. and F. H. Gibson (1963). Rare Elements in Coal. U. S. Department of the Interior, Bureau of Mines. 69 p.

ADRIAN, W. J. (1971). A New Wet Digestion Method for Biological Materials Utilizing Pressure. Atomic Absorption Newsletter 10(4):96.

Air Pollution Primer (1971). National Tuberculosis and Respiratory Disease Assoication, N. Y., N. Y.

ALTSHULLER, L. F., D. B. Halak, B. H. Landing and R. A. Kehoe (1962). Deciduous Teeth in an Index of Body Burden of Lead. J. Pediat. 60:224.

ARVIK, J. H. and r. L. Zimdahl (1974). The Influence of Temperature, pH and Metabolic Inhibitors on Uptake of Lead by Plant Roots. J. Environ. Quality 3(4):375.

ARVIK, J. H., R. L. Zimdahl, K. W. Olson, D. Dick and R. K. Skogerboe (1973). An Apparatus for the Exposure of Plants to Selected Particulate Aerosols. Rev. Sci. Instrum. 44(7):800.

BARLTROP, D. (1973). Children and Environmental Lead. Lead in the Environment. P. Hepple, Ed. Applied Science Publishers, Ltd., Barking, Essex. The Institute of Petroleum, London.

BARRY, P. S. and D. B. Mossman (1970). Lead Concentrations in Human Tissues. Brit. J. Ind. Med. 27:339.

BECKER, R. D., J. A. Spadaro and E. W. Berg (1968). The Trace Elements of Human Bone. J. Bone Joint Dis. 50:326.

BEDROSIAN, A. J., R. K. Skogerboe and G. H. Morrison (1968). Direct Emission Spectrographic Method for Trace Elements in Biological Materials. Anal. Chem. 40:854.

BERRY, J., D. Osgood and P. A. St. John (1974). Chemical Villians: A bilogy of Pollution. C. V. Mosby co., St. Lohis, Mo.

BERRY, W. L. and A. Wallace (1974). Trace Element in the Environment, Their Role and Potential Toxicity as Related to Fossil Fuels. U. S. Atomic Energy Commission Oak Ridge, Tennesse Contract No. At-(04-1) Gen 12.

BERTINE, K. K. and E. D. Goldberg (1971). Fossil Fuel Combustion and the Jamor Sedimentary Cycle. Science 173:233.

BEYER, B. (1969). Preparation of Metallic Air Pollutants for Atomic Absorption Analysis. Atomic Absorption Newsletter 8(1):23.

BINI, G. (1973). Lead in the Rural Environment -1. Inter. Journal Studies 5:59.

ATCH 1

Bituminous Coal Facts (1958). National Coal Association, Washington, D. C.

BOLTON, N. E., W. W. Lyon, R. I. Van Hook, A. W. Andren, W. Fulkerson, J. A. Carter and J. F. Emery (1973). Trace Element Measurements at the Coal-fired Allen Steam Plant. Prog. Report June 1971-jan. 1973, Oak Ridge National Laboratory, ORNL-NSF-EP-43.

BOLTON, N. E., et al., (1974). Trace Element Measurements at the Coal-fired Allen Steam Plant. Prog. Report Feb. 1973-July 1973, Oak Ridge National Laboratory, ORNL-NSF-EP-62.

BOSANQUET, C. H. and J. L. Pearson (1936). The Spread of Smoke and Gases from Chimneys. Trans. Faraday Soc. 32:1249.

BOTKIN, D. B. and R. s. Miller (1974). Complex Ecosystems: Models and Predictions. American Scientist 62:448.

BRADEY, D. V., J. C. Montalvo, Jr., J. Jung and R. A. Curran (1974). Direct Determination of Lead in Plant Leaves Via Graphite Furnace Atomic Absorption. Atomic Absorption Newsletter 13(5):118.

BRAHAM, Howard W. (1973). Lead in the California Sea Lion (Zalophus californianus). Environ. Pollution 5:253.

BRANT, D. H. (1962). Measures of the Movements and Population Densities of Small Rodents. University of California Publ. Zoo., 62(2):105.

BRIGGS, G. A. (1969). Plume Rise. Air Resources Atmospheric Turbulence and Diffusion Laboratory, Environmental Science Services Administration, U. S. Atomic Energy Commission. Oak Ridge, Tennessee.

BRUDEVOLD, F., E. T. Steadman and F. A. Smith (1960). Inorganic and Organic Components of Tooth Structure. Ann. New York Acad. Sci. 85:110.

BUCHAUER, M. (1973). Contamination of Soil and Vegetation near a zinc Smelter by Zinc, Cadmium, Copper and Lead. Environ. Sci. Tech. 7(2):181.

Bureau of Mines (1920). Coal. U. S. Department of the Interior, Washinton, D. C.

CLADER, K. L. (1961). Atmospheric Diffiusion of Particulate Material Considered as a Boundry Valve Problem. J. Meteorol. 18(3):413.

CANNON, H. L. and B. M. Anderson (1972). Trace Element Content of the Four Corners Power Plant. Coal Resources Work Group, Southwest Energy Study, Appendix J-III: U. S. Geol. Survey.

CANNON, H. L. and V. E. Swanson (1975). Contributions of Major and Minor Elements to Soils and Vegetation by the Coal-fired Four Corners Power Plant. San Juan County, New Mexico. Open-file Report No. 75-170.

CARPENTER, S. B., et al. (1970). Principal Plume Dispersion Models TVA Power Plants. Paper Presented at 63rd Annual Meeting Air Pollution Control Assoication, St. Louis, Mo.

CHISHOLM, D. and R. F. Bishop (1967). Lead Accumulation in Nova Scotia Orchard Soils. Phytoprotection No. 48.

CHISHOLM, J. Julian, Jr. (1971). Lead Poisoning. Scientific American 224:15.

CHISNALL, K. T. and J. Markland (1971). The Contamination of Pasture Land by Lead. Assoc. Public Anal. J. 9:116.

CHEW, M. R. and A. E. Chew (1969). Energy Relationships of the Mammal of a Desert Shrub (Larrea tridentata) Community. Ecological Monographs 40:1.

CHOW, T. J. (1970). Lead Accumulation in Roadside Soil and Grass. Nature 225:295.

CHOW, T. J. (1970). Environmental Pollution from Industrial Lead. Y. Miyake, Ed. Proceedings of the International Symposim on Biogeochemistry and Hydrogeochemistry, Tokyo.

CHOW, T. J. and J. L. Earl (1970). Lead Aerosols in the Atmosphere: Increasing Concentrations. Science 169:577.

CONCAWE (1966). The Calculation of Dispersion from a Stack. The Stiching, The Hague and The Netherlands.

CULLERS, H. W. (1974). Mercury in the Soils and Plants of the Area Surrounding the Dave Johnston Power Plant, Wyoming. Technical Report, Colorado State University, Ft. Collins, Colorado.

DAINES, R. H., H. L. Motto and D. M. Chilko (1970). Atmospheric Lead: Its Relationship to Traffic Volume and Proximity to Highways. Environ. Sci. Tech. 4:318.

DAVISON, R. L., D. F. S. Natusch and J. R. Wallace (1974). Trace Elements in Fly Ash. Environ. Sci. Tech. 8(13):1107.

DEDOLPH, R., G. L. Ter Haar, R. B. Holtzmann and H. Lucas, Jr. (1970). Sources of Lead in Perennial Ryegrass and Radishes. Environ. Sci. Tech. 4:217.

de TREVILLE, R. T. P. (1964). Natural Occurrence of Lead. Archives of Environ. Health 8:212.

DUPREE, W. G. and J. A. West (1972). U. S. Energy Through the Year 2000. U. S. Department of the Interior, Washington, D. C.

DYRSSEN, D. (1972). The Changing Chemistry of the Ocean. Ambio 1:24.
Egan, H. (1973). Trace Lead in Food. Lead in the Environment. Applied Science Publishers, Ltd., Barking, Essex. The Institute of Petroleum, London.

ELLIOT, W. P. (1960). A Discussion of the Calder-Deacon Equasion for Diffusion from a Continuous Point Source. Geophysics Research Directorate Research Notes No. 31. Report AFCRC-TN-60-298, Air Force Cambridge Research Center.

Energy Alternatives: A Comparative Analysis (1975). The Science and Public Policy Program, University of Oklahoma, Norman, Oklahoma.

Environmental Impact Statement (1974). Proposed Federal Coal Leasing Program. U. S. Department of the Interior, Washinton, D. C.

Environmental Impact Statement (1975). Proposed Federal Coal Leasing Program. U. S. Department of the Interior, Washington, D. C.

EVERETT, J. L., C. L. Day and D. Reynolds (1967). Comparative Survey of Lead at Selected Sites in the British Isles in Relation to Air Pollution. Food and Cosmet. Toxicology 5:29.

FERNANDEZ, F. J. (1974). Micromethod for Lead Determination in Whole Blood by Atomic Absorption with the Use of a Graphite Furnace. Clin. Chem. 20:163.

FLEMING, R. D., W. F. Marshall and J. K. Allsup (1971). Fuel Additives and Automobile Exhaust Emissions. Bureau of Mines Research, Automotive Exhaust Emissions Program. Tech. Report No. 40.

FLESCH, P. (1954). Physiology and Biochemistry of the Skin. S. Rothman, Ed. University of Chicago Press.

GAGE, J. C. and Ritchfield (1968). The Migration of Lead from Polymers in the Rat Gastronitestinal Tract. Food and Cosmet. Toxicology 6:329.

GANJE, T. J. and A. L. Page (1972). Lead Concentrations of Plants, Soil and Air near Highways. Calif. Agr. 24(4):7.

GIBBONS, D., M. Perkins and T. W. Sanders (1972). Determination of Lead in Bilogical Mateirals by Neutron Activation Analysis. Analytical Sciences Division, UKAEA, AERE, Harwell, U. K. 131 p.

GIBSON, D. (1973). Electricity, Ecology Comp. Wyoming Agriculture.

GIFFORED, F. A. (1961). Uses of Routine Meterological Observations for Estimating Atmospheric Dispersion. Nuclear Safety 2(4):47.

GILBERT, O. L. (1971). Studies Along the Edge of a Lichen Desert. Lichenologist No. 5.

GLATER, R. B. and L. Hernandez, Jr. (1972). Lead Detection in Living Plant Tissue Using a New Histochemical Method. APCA Journal 22:6.

GOLDSCHMIDT, V. M. (1954). Geochemistry. Oxford at the Clarendon Press.

GOODMAN, G. T. and T. M. Roberts (1971). Plants and Soils as Indicators of Metals in the Air. Nature 231:287.

GORDON, A. G. and E. Gorham (1963). Ecological Aspects of Air Pollution from an Iron Smeltering Plant at Wawa, Ontario. Can. J. Botany Vol. 41.

GROSS, S. B. and E. S. Parkinson (1974). Analyses of Metals in Human Tissues Using Base (TMAH) Digest and Graphite Furnace Atomic Absorption Spectrophotometry. Atomic Absorption Newsletter 13(4):107.

GUILLAUMIN, J. C. (1974). Determination of Trace Metals in Power Plant Effluents. Atomic Absorption Newsletter 13(6):135.

HAHNE, H. and W. Kroontje (1973). Significance of pH and Chloride Concentrations on Behaviro of Heavy Metal Pollutants: Mercury, Cadmium, Zinc and Lead. J. Environ. Quality 2(4):444.

HALEY, T. J. (1961). Air Quality Monographs 69-7: A Review of Toxicology of pH. American Petroleum Institute, New York.

HAMMER, D. I., J. F. Finklea, R. H. Hendricks, C. M. Shy and R. J. M.

HAMMER, D. I., J. F. Finklea, R. H. Hendricks and C. M. Shy (1971). Trace Elements in Human Hair as a Simple Epidemiological Monitor of Environmental Exposure. Amer. J. Epidemiology 97:25.

HANSEN, R. M. (1974). Monitoring Biological Changes in a Study of the Effects of the Dave Johnston Power Plant, Glenrock, Wyoming. Comprehensive Progress Report.

Heavy Metals Task Force (1972). Environmental Pollution by Lead and Other Metals. NSF Grant GI-26, GI-31605.

HEPPLE, P. (1973). Lead in the Environment. Applied Science Publishers, Ltd., Barking, Essex. The Institute of Petroleum, London.

HODGES, L. (1973). Environmental Pollution. A Survey Emphasizing Physical and Chemical Prinicples. Iowa State University, Ames, Iowa.

HORTON, (1971). Hair Trace Metal Levels and Environmental Exposure. Amer. J. Epidemiology 93:84.

HWANA, J. Y. (1972). Trace Metals in Atmospheric Particulates. Anal. Chem. 44:20A.

JEFFERIES, D. J. and M. C. French (1972). Pb Concentrations in Small Mammals Trapped on Roadside Verges and Field Sites. Environ. Pollut. 147 p.

JENKINS, D. A. and R. I. Davies (1966). Trace Element Content of Orgainic Accumulations. Nature 210:1296.

JOHN, M. K. (1972). Lead Availability Related to Soil Properties and Extracetable Lead. J. Environ. Aulity 1:295.

JOHN, M. K. and C. J. Van Laerhoven (1972). Lead Uptake by Lettuce and Oats as Affected by Lime Nitrogen and Sources of Lead. J. Environ. Qulaity 1:169.

JOHN, M. K. and C. J. Van Laerhoven and H. H. Chuah (1972). Cadmium Contamination of Soil and Its Uptake by Oats. Environ. Sci. Tech. 6:555.

JONES, H. P. and C. R. Clement (1973). Lead Uptake by Plants and Its Significance for Animals. Applied Science Publishers, Ltd., Barking Essex. The Institute of Petroleum, London.

JONES, J. S. and M. B. Hatch (1945). Spray Residues and Crop Assimilation of Arsenic and Lead. Soil Sci. 60:277.

JULSHAMN, K. and O. R. Braekkan (1975). Determination of Trace Elements in Fish Tissues by the Standard Addition Method. Atomic Absorption Newsletter 14(3):49.

KAAKINEN, J. W., R. M. Jordan, R. E. West and M. H. Lawasani (1975). Trace Element Behavior in Coal-fired Power Plant. Environ. Sci. Tech. 9:862.

KAHN, H. L. and D. C. Manning (1972). Background Correction in Atomic Absorption Spectroscopy. American Laboratory AA-691.

KAHN, H. L., F. J. Fernandez and S. Slavin (1973). The Determination of Lead and Cadmium in Soils and Leaves by Atomic Absorption Spectrophotometry. Atomic Absorption Newsletter II.

KEHOE, R. A. (1961). Experimental Studies on the Inhalation of Lead by Human Subjects. Pure Appl. Chem. 3:129.

KEHOE, R. A. (1961). The Metabolism of Lead in Man in Health and Disease, The normal Metabolism of Lead. The Harben Lectures. J. Roy. Institute of Public Health 24:177.

KEHOE, R. A. (1964). Metabolism of Lead under Abnormal Conditions. Archives of Environ. Health 8:225.

KEHOE, R. A. (1964). Normal Metabolism of Lead. Archives of Environ. Health 8:232.

KLEIN, D. H. and P. Russell (1973). Heavy Metals: Fallout Around a Power Plant. Environ. Sci. Tech. 7:4.

KOBAYASHI, J. (1971). Air and Water Pollution by Cadmium, Lead and Zinc Attributed to the Largest Zinc Refinery in Japan. Institue for Agriculture and Biological Sciences, Okayama University, Kurashiki, Japan.

KOIRTYOHANN, S. R., H. Sievers and E. E. Pickett (1970). The Electrically Heated Furnace in Atomic Absorption. Department of Agricultural Chemistry, University of Missouri, Colubia, Mo.

KIPITO, L., A. M. Briley and H. Shwachman (1969). J. A. M. A. 209:243.

KOPITO, L., K. B. Randolph and H. Shwachman (1967). New England Journal of Medicine 276:949.

KOWAL, N. E. (1971). System Analysis and Simulation in Ecology: Formulation of Pattern Modeling Dynamic Ecological Systems. B. C. Academic Press, N. Y. and London 1:130.

LAGERWEFF, J. V. (1971). Uptake of Cadmium, Lead and Zinc by Radish from Soil and Air. Soil Sci. 111:129.

LAGERWERFF, J. V. (1972). Lead, Mercury and Cadmium as Environmental Contaminants. Agricultural Research Service, United States Departments of Agriculture, Beltsville, Maryland, 666 p.

LAGERWERFF, J. V. and A. W. Sprecht (1971). Contamination of Roadside Soil and Vegetation with Cadmium, Lead and Zinc. Environ. Sci. Tech. 4:583.

LAWASANI, Mohammed Hussain (1975). Model of Fate of Trace Elements in Coal-fired Power Plant. Summary of Master's Thesis, University of Colorado, Boulder, Colorado.

LEAKEY, L. S. B. (1962). Annual Magazine of National History 4:689.

LEE, R. E., Jr., H. L. Grist, A. E. Riley and K. E. MacLeod (1975). Concentration and Size of Trace Metal Emissions from a Power Plant, a Steel Plant and a Cotton Gin. Environ. Sci. Tech. 9(7):643.

L'VOV, B. V. (1961). The Analytical Use of Atomic Absorption Spectra. Spectrochim Acta 17:761.

MACLEAN, A. J., R. L. Halstead and B. J. Fian (1969). Extractability of Added Lead in Soils and Its Concentration in Plants. Can. Journal of Soil Science 49:427.

MARTEN, G. C. and P. B. Hammond (1966). Lead Uptake by Bromegrass from Contaminated Soils. Agron. J. 58:553.

MASON, B. (1966).. Principles of Geochemistry. John Wiley, New York.

MASSMANN, H. (1968). Vergleich von Atomabsorption and Atomfluoreszenz in der Graphitkuvette. Spectrochim Acta 23B:215.

MCNAUGHTON, S. J. and L. L. Wolf (1973). General Biology. Holt, Rinehart and Winston, Inc.

MITCHELL, R. L. (1964). Trace Elements in Soils. F. E. Bear, Ed. Chemistry of the Soil, 2nd Edition, London, 320 p.

MITCHELL, R. L. and J. W. S. Reith (1966). The Lead Content of Pasture Herbage. J. Sci. Food Agric. 17:437.

MORIBER, G. (1974). Environmental Contaminants in the Atmosphere. Environmental Science, Allyn and Bacon, Inc., 135 p.

MOTTO, H. L, R. H. Daines, D. M. Chilko and C. K. Motto (1970). Lead in Soils and Plants: Its Relationship to Traffic Volume and Proximity to Highways. Environ. Sci. Tech. 4:231.

National Air Pollution Control Administration (1969). Tall Stacks, Various Atmospheric Phenomena and Related Aspects. U. S. Department of Health, Education and Welfare, NAPCA Pub. No. APTD 69-12.

National Reserach Council (1972). Bilogic Effects of Atmospheric Pollutants Lead--Airborne Lead in Perspective. National Academy of Sciences, Washington, D. C.

NATUSCH, D. S., J. R. Wallace and C. A. Evans, Jr. (1974). Toxic Trace Elements Preferential Concentration in Respirable Particles. Science 183:202.

NIEBOER, E., J. L. Amad, K. J. Puckett and K. H. S. Richardson (1972). Heavy Metal Content of Lichens in Relations to Distance from a Nickel Smelter in Sudbury, Ontario. Lichenologist (OXF) f:292.

NIEMEYER, L. E., R. A. McCormick and J. H. Ludwig (1971). Environmental Aspects of Power Plants. National Air Pollution Control Adminstration, Washington, D. C. COM-71-01042.

NINO,H. V. (1975). Analytical Aspects of Heavy Metal Intoxication. Laboratory Medicine 6(12):36.

NUSBAUM, R. E., E. M. Butt, T. C. Gilmour and S. L. Didio (1965). Relation of Air Pollutants to Trace Metals in Bone. Archives of Environ. Health 10:227.

PASQUILL, F. (1961). The Estimation of the Dispersion of Windborne Material. Meteorol. Mag. 90(1036):33.

PATTERSON, C. C. (1965). Contaminated and Natural Lead Environments of Man. Archives of Environ. Health 11:344.

PATTERSON, C. C. and H. Yoshimitsu (1974). Lead Aerosol Pollution in the High Sierra Overrides Natural Mechanisms Which Eclude Lead from a Food Chain. Science 184:989.

Perkin-Elmer Corporation (1972). Indepedent Laboratory List (North America). Perkin-Elmer Corporation, Norwalk, Wonn. AA692.

Perkin-Elmer Corporation (1972). High Sensitivity Sampling Systems for Atomic Absorption. Perkin-Elmer Corporation, Norwalk, Conn. L3324.

PICKFORD, C. J. and G. Rossi (1975). Determination of Some Trace Elements in NBS (SRM-1577), Bovine Liver Using Flameless Atomic Absorption and Solid Sampling. Atomic Absorption Newsletter 14(4):1975.

POST, G. (1974). Histopathological Study at the Dave Johnston Power Plant, Glenrock, Wyoming.

RENSHAW, G. D., C. A. Pounds and Pearson (1972). Variation in Lead Concentration along Single Hairs as Measured by Non-flame Atomic Absorption Spectrophotometry. Nature 238 p.

REVELLE, C. and P. Revelle (1974). Source Book of the Environment. The Scientific Perspective, Houghton Mifflin Co.

RIGERT, R. A. (1975). Pacific Power and Light Company. Meterological Joint Frequency, Distribution Printant, Public Service Building, Portland, Oregon.

RUCH, R. R., H. J. Gluskoter and N. F. Shimp (1973). Occurrence and Distribution of Potentially Volatile Trace Elements in Coal: An Interim Report. Environ. Geol. Illinois State Geol. Survey 61:43.

SANDERSON, G. G. and R. M. Thomas (1961). Incidence of Pb in Liver of Illinois Racoons. Journal Wildlife Management 25:160.

SCHROEDER, H. A., J. J. Balassa, F. S. Gibson and others (1961). Abnormal Trace Metals in Man: Lead. J. Chron. Dis. 14:408.

SCHROEDER, H. A. (1973). The Trace Elements in Man: Some Positive and Negative Aspects. Devin, New York.

SCHROEDER, H. A. and I. H. Tipton (1968). The Human Body Burden of Lead. Archives of Environ. Health 17:965.

SCHROEDER, H. A., J. J. Balassa and W. H. Vinton (1965). Chromium, Cadmium and Lead in Rats--Effects of Life Span, Tumors and Tissue Levels. J. Nutr. 86:51.

SEELEY, J. L., D. Dick, J. H. Arvik, R. L. Zimdahl and R. K. Skogerboe (1972). Determination of Lead in Soil. Appl. Spectroscopy 26(4):456.

SIMPSON, et al. (1974). Digestion in Food Analysis by Atomic Absorption Varian Techtron.

SHACKLETTE, H. T. and J. C. Boerngen (1971). Element Composition of Surficial Materials in the Conterminous United States. U. s. Geol. Survey Prof. Paper 547-D.

SKOGERBOE, R. K. (1972). Impact on Man of Environmental Contamination Caused by Lead. Analytical Chemistry of Lead in Environmental Samples. H. W. Edwards, ED. NSF Grant GI-4.

SLADE, D. H. (1968). Ed. Meteorology and Atomic Energy. U. S. Atomic Energy Comm., Div. of Tech. Inf., Washington, D. C.

SLAVIN, W. and Slavin (1969). Recent Trends in Analytical Atomic Absorption Spectroscopy. Appl. Spectroscopy 23(5):421.

SNYDER, R. B., D. J. Wuebbles, J. E. Pearson and B. B. Ewing (1971). A Study of Environmental Pollution by Lead. Illinois Institute for Environmental Quality, Springfield, Illinois.

STREHLOW, D. D. and T. J. Kneip (1969). The Distribution of Lead and Zinc in the Human Skeleton. Amer. Ind. Hyg. Assoc. J. 30:372.

SWAINE, D. J. and R. L. Mitchell (1960). Trace Element Distribution in Soil Profiles. J. Soil Sci. 11:347.

SWANSON, V. E. (1972). Composition and Trace Element Content of Coal and Power Plant Ash. Pt. 2 in Appendix J of Southwest Energy Study: United States Geol. Survey Open-file Report, 61 p.

TER HARR, G. L. (1970). Air as a Source of Lead in Edible Crops. Environ. Sci. Tech. 4:226.

TER HARR, G. L., R. R. DeDeolph, R. B. Holtzman and H. F. Lucas (1969). The Lead Uptake by Perennial Ryegrass and Radishes from Air, Water and Soil. Environ. Res. 2:267.

TIPTON, I. H. and M. J. Cook (1963). Trace Elements in Human Tissue, Part II. Hlth. Phys. 9:103.

TIPTON, I. H. and J. J. Shafer (1964). Statistical Analysis of Lung Trace Element Levels. Archives of Environ. Health 8:58.

THOEM, T. L. (1975). Coal-fired Power Plant. Trace Element Study, Environmental Protection Agency, Rocky Mountain-Prairie Region, Region VIII.

THOMPSON, R. J., G. B. Morgan and L. J. Purdue (1970). Analysis of Selected Elements in Atmospheric Particulate Matter by Atomic Absorption. Atomic Absorption Newsletter 9(3):53.

TURNER, D. B. (1970). Workbook of Atmospheric Dispersion Estimates. U. S. Public Health Service Publication No. 99-AP-26.

U. S. Environmental Protection Agency (1972). Environmental Pollution Study, Helena Valley, Montana.

U. S. Geological Survey (1974). Geochemical Survey of the Western Coal Regions. U. S. Department of the Interior. Open-file Report No. 74-250.

U. S. Geological Survey (1975). Geological Survey of the Western Coal Regions. U. S. Department of the Interior. Open-file Report No. 75-436.

U. S. National Academy of Sciences Report (1971). Airborne Lead in Perspective. Washington, D. C.

WALDBOTT, G. L. (1973). Helath Effects of Environmental Pollutants. C. V. Mosby Co., St. Louis, Mo. 131 p.

WALSH, A. (1975). Atomic Absorption. Spectrochim Acta 7:108.

WARREN, H. V. and R. E. Delavault (1962). Lead in Some Food Crops and Trees. J. Sci. Food Agr. 13:96.

WARREN, H. V. and R. E. Delavault (1971). Variations in the Cu, Zn, Pb and Mo Contents of Some Vegetables and Their Supporting Soils. Mem. Geol. Soc. Am. 123:97.

WARREN, H. V., R. E. Delavault, K. Fletcher and E. Wilks (1970). Variations in the Cu, Zn, Pb and Mo Concentent of Some British Columbia Vegetables in Trace Substances in Environmental Health. D. D. Hemphill, Ed. University of Missouri, Columbia, Mo.

WEDEPOHL, H. (1969). Handbook of Chemistry. Springer-Verlag, New York.

WEISS, D. and B. Whitten (1972). Lead Content in Human Hair (1871-1971). Science 178:69.

WELCH, W. R. (1972). Lead Concentrations in Tissues of Road Mice. Thesis, Colorado State University, Ft. Collins, Colorado.

WELCH, W. R. (1972). Environmental Contamination by Pb from Automobile Exhaust. A Literature Review, Colorado State University, Ft. Collins, Colorado.

WELCH, W. R. and C. G. Wilber (1972). Lead in Tissues of Roadside Mice: Impact on Man of Environmental Contamination Caused by Lead. Edwards, Ed. Colorado State University, Ft. Collins, Colorado NSF Grant GI-4.

WELLS, A. E. (1971). Results of Recent Investigations of the Smelter Smoke Problem. Ind. Eng. Chem. 9:640.

WEST, T. S. and K. K. Williams (1969). Atomic Absorption and Flourescence Spectroscopy with a Carbon Filament Atom Reservoir. Anal. Chem. Acta 45:27.

WIXSON, B. G. and J. C. Jennett (1975). The New Lead Belt in the Forested Ozarks of Missouri. Environ. Sci. Tech. 9(13).

WOODRIFF, R. and R. W. Stone (1968). Hot Tube Atomic Absorption Spectrochemistry. Appl. Optics 7:1337.

WILBER, C. G., W. Word, J. Edde and T. Short (1975). The Analysis of Biotic Materials for Heavy Metal in Low Concentrations. A Technical Report, Colorado State University, Ft. Collins, Colorado.

YOAKUM, A. M., P. L. Stewart and J. E. Sterrett (1975). Method Development and Subsequent Survey Analysis of Biological Tissues for Platinum, Lead and Manganese Content. Environ. Health Perspectives Vol. 10.

ZIMDAHL, R. L. (1972). Lead in Soils and Plants: Impact on Man of Environmental Contamination Caused by Lead. Edwards, Ed. Colorado State University, Ft. Collins, Colorado NSF Grant GI-4.

ZIMDAHL, R. L. and J. H. Arvik (1973). Lead in Soils and Plants. A Literature Review, Colorado State University, Ft. Collins, Colorado.

ZIMDAHL, R. L., J. H. Arvik and R. K. Skogerboe (1973). Soil Sorption of Lead. Colorado State University, Ft. Collins, Colorado.

APPENDIX C

This Appendix includes supplemental articles that are relevant to this study but were not utilized in the bibliography.

ABERNETHY, R. F., M. M. Peterson and F. H. Gibson (1969). Major Ash Constituents in U. S. Coals. U. S. Department of the Interior, Bureau of Mines Report of Investigation 9 p.

ALLAWAY, W. H. (1975). The Effect of Soils and Fertilizers on Human and Animal Nutrition. U. S. Department of Agriculture, Agriculture Information Bulletin 378:1.

ALLCROFT, R. (1950). Lead as a Nurtitional Hazard to Farm Livestock. IV. Distribution of Lead in the Tissues of Bovines after Ingestion of Various Lead Compounds. J. Comp. Path. 60:190.

ALUSBAUM, R. E., E. M. Butt, T. C. Gilmour and A. B. Didio (1965). Relation of Air Polutants to Trace Metals in Bone. Archives of Environ. Health Vol. 10.

ANDREN, A. W. and D. H. Klein (1975). Selenium in Coal-fired Steam Plant Emissions. Environ. Sci. Tech. 9(9)856.

ARESCO, S. J., J. B. Janus and F. E. Walker (1964). Analyses of Tipple and Delivered Samples of Coal Collected during Fiscal Year 1958. U. S. Department of the Interior, Bureau of Mines Report of Investigation 5489.

AVERITT, P. J. (1972). Coal Resources and Reserves of Southwestern U. S. Coal Resources Work Group, Southwest Energy Study, Appendix J-II: U. S. Geological Survey.

BABCOCK, K. L. and C. M. Marion (1972). Effect of Ion-pair Formation of the Solubility Product. Soil Sci. Soc. Amer. Proc. 36:689.

BARLTROP, D., C. D. Strehlow, I. Thornton and J. S. Webb (1974). Environ. Health Perspect. 7:75.

BAUMHARDT, G. L. and L. F. Welch (1972). Lead Uptake and Corn Growth with Soil Applied Lead. J. Environ. Quality 1(1):92.

BAUMHARDT, C. R. (1970). Absorption by and Growth of Corn (Zea mays l.) with Soil Applied Lead. Master's Thesis, University of Illinois, 55 p.

BAZELL, R. J. (1971). Lead Poisoning: Combating the Treat from the Air. Science 174:130.

BENTON, H. A. and Werner, Jr. (1974). Field Biology and Ecology. Human Ecology: Pollution.

BERK, P. D., D. P. Tschudy, L. A. Shepley, J. G. Waggoner and N. I.

BERLIN (1970). Hematologic and Biochemical Studies in a Case of Lead Poisoning. Amer. J. Med. 48:137.

BLAXTER, K. L. (1950). J. Comp. Path. Ther. 60:140.

BOAR, P. L. and L. K. Ingram (1970). Analyst 95:124.

BOERSMA, L., J. W. Cary, D. D. Evans, A. H. Ferguson, W. H. Gardner, R. J. Hanks, R. D. Jackson, W. D. Kemper, D. E. Miller, D. R. Nielsen and G. Vehara (1972). Soil Water. American Society of Agronomy and Soil Science of America.

BOLANOWSKA, W. (1968). Distribution and Excretion of Triethyllead in Rats. Brit. J. Ind. Med. 25:203.

BOND, R. G., C. P. Straub and R. Prober, Eds. (1972). Handbook of Environmental Control. Vol. 1: Air Pollution. CRC Press.

BOWEN, H. J. M. (1966). Trace Elements in Biochemistry. Academic Press, New York.

BOVE, j. L. and S. Siedenberg (1970). Airborne Lead and Carbon Monoxide. Science 167:986.

BRATZEL, M. P. and J. A. Reed (1974). Microsampling for Blood Lead Analysis. Clin. Chem. 20:217.

BREWER, R. F. (1966). Diagnostic Criteria for Plants and Soils. H. D. Chapman, Ed. Div. Agr. Sci., University of California, 213 p.

BRIGGS, G. A. (1969). Plume Rise. Air Resources Atmospheric Turbulence and Diffusion Laboratory, Environmental Science Services Administration, U. S. Atomic Energy Commission, Oak Ridge, Tennessee.

BROOKS, A. A., et al. (1973). Development of a Unifield Transport Model for Toxic Materials in Ecology and Analysis Contaminants. Prog. Report, Oak Ridge National Laboratory ORNL-NSF-1.

BUTT, E. M., R. E. Nusbaum, T. C. Gilmour and S. L. Didio (1964). Trace Metal Levels in Human Serum and Blood. Archives of Environ. Health 8:52.

CALANDRA, J. C. (1966). Lead in the Environment. 38th Annual Meeting of the Lead Industries Association, Inc., St. Louis, Mo.

CANNON, H. L. and J. M. Bowles (1962). Contamination of Vegetation by Tetraethyl Lead. Science 137:765.

CANTROW, A. and M. Trumper (1944). Lead Poisoning. Williams and Wilkins Co., Baltimore, Md.

CASTELLINO, N. and S. A. Loj (1969). Intracellular Distribution of Lead in the Liver and Kidney of the Rat. Brit. J. Ind. Med. 26:139.

CHISHOLM, J. J., Jr. (1968). Determination of δ-Aminolevulinic Acid in Plasma. Anal. Biochem. 22:54.

CHOLAK, J., L. J. Schafer and T. D. Sterling (1961). The Lead Content of the Atmosphere. APCA Journal 11:281.

CHOW, T. J. and C. C. Patterson (1965). Contaminated and Natural Lead Environments of Man. Archives of Eniron. Health Vol. 11.

CLARKSON, T. W. and J. E. Kench (1958). Uptake of Lead by Human Erythrocytes in vitro. Biochem. J. 69:432.

CONNOR, J. J., J. E. Erdman, J. D. Sims and R. J. Ekens (1970). Roadside Effects on Trace Metal Content in Some Rocks, Soils and Plants of Missouri. Trace Substances in Environmental Health-Iv.

COSTESCU, L. and T. C. Hutchinson (1971). Abstr. 22nd Annual AIBS Meeting of Biolgical Societies, Fort Collins, Colorado. Bulletin Ecol. Soc. Amer. 52:2.

COX, W. J. and W. D. Rains (1972). Effect of Lime on Lead Uptake by Five Plant Species. J. Environ. Quality 1(2).

CUFFE, S. T. and R. W. Gerstle (1967). Emissions from Coal-fired Power Plants. U. S. Public Health Service, Washington, D. C. Report 999-AP-35.

DAVISON, R. L., et al. (1974). Trace Elements in Fly Ash. Dependence of Concentration on Particle Size. Environ. Sci. Tech. 8:1107.

DAVIDSON, J. M., L. R. Stone, D. R. Nielsen and M. E. LaRue (1969). Field Measurement and Use of Soil-water Properties. Water Resources Res. 5:1312.

DEDOLPH, R., G. Ter Haar, R. Holtzman and H. Lucas, Jr. (1969). Presented at 157th ACS Meeting, Minneapolis, Minn.

DELVES, H. T. (1970). A Micro-sampling Method for the Rapid Determination of Lead in Blood by Atomic-absorption Spectrophotometry. Analyst 95:431.

DODD, D. C. and E. L. J. Staples (1956). Clinical Lead Poisoning in the Dog. New Zealand Vet. J. 4:1.

DOWDLE, E. B., P. Mustard and L. Eales (1967). δ-Aminolaevulinic Acid Synthetase Activity in Normal and Porphric Human Livers. S. Afr. Med. J. 41:1093.

DUCE, R. A., G. L. Hoffman and W. H. Zoller (1975). Atmospheric Trace Metals at Remote Northern and Southern Hemisphere Sites: Pollution or Natural? Science 187:59.

DUNN, J. T. and H. C. L. Bloxam (1932). The Presence of Lead in the Herbage and Soil of Lands Adjoining Coke Ovens and the Illness and Poisoning of Stock Fed Thereon. J. Soc. Chem. Ind. 51:100.

EDWARDS, H. W., M. L. Corrin, L. O. Grant, L. M. Hartman, E. R. Reiter, R. K. Skogerboe, C. G. Wilber and R. L. Zimdahl (1971). Impact on Man of Enivornmental Contamination Caused by Lead. Interim Report July 1, 1970 to June 20, 1971. Colorado State University, Ft. Collins, Colorado NSF Grant GI-4.

EGAN, D. A. and T. O'Cuill (1970). Cumulative Lead Poisoning in Horses in a Mining Area Contaminated with Galena. Vet. Rec. 86:736.

EGAN, D. A. and T. O'Cuill (1969). Opencast Lead Mining Areas--A Toxic Hazard to Grazing Stock. Vet. Rec. 84:230.

Emissions from Coal-fired Power Plants (1967). A Comprehensive Summary. U. S. Public Health Services, Washington, D. C.

ERDMAN, J. A. and L. P. Cough (1975). Trace Elements in Soil Lichen and Gramma Grass of the Powder River Basin:Geochemical Survey of the Western Coal Regions. U. S. Geological Survey, Open-file Report No. 75-436.

EVENSON, M. A. and D. D. Pendergast (1974). Rapid Ultramicro Direct Determination of Erythrocyte Lead Concentration by Atomic Absorption Spectrometry. Anal. Chem. 43:1319.

Environmental Impact Statement (1973). Proposed Federal Coal Leasing Program. U. S. Department of the Interior, Washington, D. C.

FAIREY, F. S. and J. W. Gray, III (1970). Soil Lead and Pediatric Lead Poisoning in Charleston, S. C. J. of the S. C. Med. Assoc. 79 p.

FAIRHALL, L. T. and J. W. Miller (1941). The Deposition and Removal of Lead in the Soft Tissues (Liver, Kidneys and Spleen). U. S. Public Health, Washington, D. C. Rep. 56:1641.

FIELDNER, A. C., W. E. Rice and H. E. Moran (1942). Typical Analyses of Coals of the United States. U. S. Department of the Interior, Bureau of Mines, Bulletin 446.

FOREMAN, H., H. L. Hardy, T. L. Shipman and E. L. Belknap (1953). Use of Calcium Ethylenediaminetetraacetate in Cases of Lead Intoxiaction. A. M. A Arch. Ind. Hyg. 7:148.

FREEMAN, R. (1965). Reversible Myocarditis Due to Chronic Lead Poisoning in Childhood. Arch. Dis. Child. 40:389.

FULLERTON, P. M1 (1966). Chronic Peripheral Neuropathy Produced by Lead Poisoning in Guinea-pigs. J. Neuropath. Exp. Neurol. 25:214.

FUSSELL, D. R. (1970). Petrol. Rev. 192 p.

GALZIGNA, et al. (1963). Clin. Chim. Acta 26:391.

Geochemical Survey of the Western Coal Regions (1975). U. S. Department of the Interior, Geological Survey Report No. 75-436.

GOLDSMITH, J. R. and A. C. Hexter (1967). Respiratory Exposure to Lead: Epidemiological and Experimental Dose-Response Relationships. Science 158:132.

GOLDWATER, L. J. and A. W. Hoover (1967). An International Study of "Normal" Levels of Lead in Blood and Urine. Archives of Environ. Health 15:60.

GORDON, G. E. and W. H. Zoller (1973). Normalizations and Interpretation of Atmospheric Trace-Element Concentration Patterns. Oak Ridge Trace Elements Conference, Oak Ridge, Tennessee.

GOYER, R. A. (1968). The Renal Tubule in Lead Poisoning. I: Mitochondrial Swelling and Aminoaciduria. Lab. Invest. 19:71.

GOYER, R. A., A. Krall and J. P. Kimball (1968). The Renal Tubule in Lead Poisoning. II: In vitro Studies of Mitochondrial Structure and Function. Lab. Invest. 19:78.

GOYER, R. A., P. May, M. M. Cates and M. R. Krigman (1970). Lead and Protein Content of Isolated Intranuclear Inclusion Bodies form Kidneys of Lead-poisoned Rats. Lab. Invest. 22:245.

GRIGGS, R. C. (1964). Lead Poisoning: Hematologic Aspects. C. V. Moore and E. B. Brown, Eds. Progress in Hematology.

GRIGGS, R. C., I. Sunshine, V. A. Newill, B. W. Newton, S. Buchanan and C. A. Rasch (1964). Environmental Factors in Childhood Lead Poisoning. J. A. M. A. 187:703.

GRODINS, F. S. (1963). Control Theory and Biological Systems. Columbia University Press, New York.

HALL, Stephen K. (1972). Pollution and Poisoning. Environ. Sci. Tech. 6:31.

HAMMOND, P. B. and A. L. Aronson (1960). The Mobilization and Excretion of Lead in Cattle: A Comparative Study of Various Chelating Agents. Ann. New York Acad. Sci. 88:498.

HAMMOND, P. B., H. N. Wright and M. H. Roepke (1956). A Method for the Detection of Lead in Bovine Blood and Liver. University of Minnesota Agric. Exp. Sta. Tech. Bulletin No. 221:14.

HARLEY, J. H. (1970). Sources of Lead in Peennial Ryegrass and Radishes. Environ. Sci. Tech. 4:225.

HARRISON, W. W., J. P. Yurachek and C. A. Benson (1969). The Determination of Trace Elements in Human Hair by Atomic Absorption Spectroscopy. Clin. Chim. Acta 23:83.

HARRY, P. S. I. and D. B. Mossman (1970). Lead Concentrations in Human Tissues. Brit. J. Ind. Med. 27:339.

HASAN, J., V. Vihko and S. Hernberg (1967). Deficient Red Cell Membrane /Na+ + K+/-ATPase in Lead Poisoning. Archives of Environ. Health 14:313.

HATCH, R. C. and H. S. Runnell (1969). Lead Levels in Tissues and Stomach Contents of Poisoned Cattle: A Fifteen Year Study. Can. Vet. J. 10:258.

HAUGHT, O. L. (1954). Occurrence and Distribution of Minor Elements in coal. University of Missouri School of Mines and Metals. Tech. Ser. No. 85 17 p.

HENDERSON, D. A. and J. A. Inglis (1957). The Lead Content of Bone in Chronic Bright's Disease. Australas. Ann. Med. 6:145.

HERNBERG, S. and J. Nikkanen (1970). Lancet 1:63.

HOPKINS, A (1970). Experimental Lead Poisoning in the Baboon. Brit. J. Ind. Med. 27:130.

HORIUCHI, K., S. Horiguchi and M. Suekane (1959). Studies on the Industrial Lead Poisoning. 1. Absorption, Transportation, Deposition and Excretion of Lead. 6. The Lead Contents in Organ-Tissues of the Normal Japanese. Osaka City Med. J. 5:41.

HWANG, J. Y., P. A. Ullucci and C. J. Modeler (1973). Direct Flameless Atomic Absorption Determination of Lead in Blood. Anal. Chem. 45:795.

IMAMURA, Y. (1957). Studies on the Industrial Lead Poisoning. 1. Aborption, Transportation, Deposition and Excretion of Lead. 3. An Experimental Study of Lead Intake in Human Being. Osaka City Med. j. 3:167.

JAWOROWSKI, Z. (1968). Stable Lead in Fossil Ice and Bones. Nature 217:152.

JAWOROWSKI, Z., J. Bilkiewicz and W. Kostanecki (1966). The Uptake of Pb by Resting and Growing Hair. Int. J. Rad. Biol. 11:563.

JENSEN, W. M., G. D. Moreno and M. C. Bessis (1965). An Electron Microscopic Descritpion of Basophilic Stippling in Red Cells. Blood 25:933.

JOHN, M. K. (1971). Lead Contamination of Some Agricultural Soils in Western Canada. Environ. Sci. Tech. 5:1199.

JONES, J. R. E. (1964). The Metals as Salts. In Fish and River Pollution, London, 66 p.

JORDAN, J. S. and F. C. Bellrose (1951). Lead Poisoning in Wild Waterfowl. Illinois Naural Hist. Survey Biol. Notes 26:1.

KAHN, H. L. (1968). Principles and Practice of Atomic Absorption. Advances in Chemistry Series 77:183.

KEATON, C. M. (1937). The Influence of Lead Compounds on the Growth of Barley. Soil Sci. 43:401.

KEHOE, R. A., J. Cholak, R. U. Story (1940). A Spectrochemical Study of the Normal Ranges of Concentrations of Certain Trace Elements in Biological Materials. J. Nutr. 19:579.

KEHOE, R. A. (1969). APAC Journal 19:690.

KIETH, R. J., Anderson, B. M. and J. J. Connor (1974). Trace Metal Variation in the Powder River Basin: Geochemical Survey of the Western Coal Regions. U. S. Geological Survey, Open-file Report No. 74-250.

KOIRTYOHANN, S. R. and E. E. Pickett (1966). Spectral Interferences in Atomic Absorption Spectrometry. Anal. Chem. 38:585.

KUBASIK, N. P. and M. T. Volosin (1974). Use of the Carbon Rod Atomizer Applied to Measurement of Lead in Whole Blood by Atomic Absorption Spectrophotometry. Clin. Chem. 18:410.

KUBASIK, N. P. and M. T. Volosin (1973). A simplified Determination of Urinary Cadmium, Lead and Thallim, with Use of Carbon Rod Atomization and Atomic Absorption Spectrophotometry. Clin. Chem. 19:954.

LAGERWERFF, J. V. (1967). Heavy Metal Contamination of Soils. N. C. Brady, Ed. Agriculture and the Quality of Our Environment. American Association for the Advancement of Science, Washinton, D. C., 343 p.

LANE, R. E. (1965). The Clinical Aspects of Poisoning by Inorganic Lead Compounds. Ann. Occup. Hyg. 8:31.

LAZRUS, A. L., E. Lorange and J. P. Lodge, Jr. (1970). Lead and Other Metal Ions in United States Precipitation. Environ. Sci. Tech. 4:55. Lead in Air (1971). Lancet 2:653.

LEE, R. E., Jr., R. K. Patterson and Wagman (1968). Particle Size Distribution of Metal Components in Urban Air. Environ. Sci Tech. 2:288.

LITTLE, P. (1973). A Study of Heavy Metal Contamination of Leaf Surfaces. Environ. Pollut. 5:159.

LUDWIG, J. H., D. R. Diggs, H. E. Hesselberg and J. S. Magga (1965). Survey of Lead in the Atmosphere of Three Urban Communities. Am. Ind. Hyg. Assoc. 26:270.

LUTMER, R. F., K. A. Busch and R. G. Miller (1967). Lead from Auto Exhaust: Effect on Mouse Bone Lead Concentration. Atmos. Environ. 1:585.

L'VOV, B. V. (1969). Spectrochim Acta 24B(53).

LYONS, W. W. (1971). Trace Element Profiles through a Coal-fired Steam Plant. Oak Ridge National Laboratory, Oak Ridge, Tennessee.

MEHANI, S. (1966). Lead Retention by the Lungs of Lead-exposed workers. Ann. Occup. Hyg. 9:165.

METCALF, R. L. and B. B. Ewing (1969). Proposal for an Interdisciplinary Study of Environmental Pollution by Lead. University of Illinois. Minerals Yearbook (1969) (1971). U. S. Bureau of Mines, U. S. Government Printing Office, Washington, D. C.

MILLER, R. A. and D. B. Botkin (1974). Endangered Species: Models and Predications. Am. Sci. 62:172.

MONIER-WILLIAMS, G. W. (1938). Lead in Food. Reports on Public Health and Medical Subjects, Ministry of Health, London No. 88.

MUELLER, B. K. and Stanley (1970). Origin of Lead in Surface Vegetation. California Department of Public Health, Air and Industrial Hygiene Laboratory, Berkeley, California, AIHL Report No. 87, 15 p.

MUELLER, P. K., H. L. Helwig, A. E. Alcocer, W. K. Gong and E. E. Jones (1962). Concentration of Fine Particles and Pb in Car Exhaust. Am. Soc. Testing Mater. Spec. Tech. Publ. No. 352:60.

NIX, J. and T. Goodwin (1970). The Simultaneous Extraction of Iron, Manganese, Copper, Cobalt, Nickel, Chromium, Lead and Zinc from Natural Water for Determination by Atomic Absorption Spectroscopy. Atomic Absorption Newsletter 9:119.

OLSON, W. K. and Skogerboe (1975). Identification of Soil Lead Compounds from Automotive Sources. Environ. Sci. Tech. 9:219.

ORNING, A. A. (1958). Industrial Sources of Air Pollution: Electric Power Plants (Coal Fuel). Proceedings, National Conference on Air Pollution, U. S. Department of Health, Education and Welfare, Washington, D. C. 18:155.

O'GORMAN, J. Y. and P. L. Walker, Jr. (1972). Mineral Matter and Trace Elements in U. S. Coals. Office of Coal Research, U. S. Department of Interior, Washinton, D. C. Research and Development Report No. 61.

PAGE, A. L., T. J. Ganje and M. S. Joshi (1971). Lead Quantities in Plants, Soil and Air near Some Major Highways in Southern California. Hilgardia 41:1.

PAGE, A. L. and T. J. Ganje (1970). Accumulations of Lead in Soils for Regions of High and Low Motor Vehicle Traffic Density. Environ. Sci. Tech. 4:140.

Perkin-Elmer Corporation (1968). Analytical Methods for Atomic Absorption Spectrophotometry. Perkin-Elmer Corporation, Norwalk, Conn.

Perkin-Elmer Corporation (1970). Analysis of Biological Materials in the Heated Graphite Furnace HGA-70. Atomic Absorption Application Study No. 436. Perkin-Elmer Corporation, Norwalk, Conn.

Perkin-Elmer Corporation (1971). Micro Determination of Lead in Blood with the Graphite Furnace. Atomic Absorption Application Study No. 512. Perkin-Elmer Corporation, Norwalk, Conn.

RINER, J. C., F. C. Wright and C. A. McBeth (1974). A Technique for Determining Lead in Feces of Cattle by Flameless Atomic Absorption Spectrophotometry. Atomic Absorption Newsletter 13(6):129.

ROHRMAN, F. A., J. H. Ludwig and B. J. Steigerwald (1965). Coal Utilization and Atmospheric Pollution. Coal, Today and Tomorrow 19:5.

ROSEN, J. F. (1972). The Microdetermination of Blood Lead in Children by Flameless Atomic Absorption: The Carbon Rod Atomizer. Lab. Clin. Med. 80:567.

ROWLAND, R. F. and P. F. Gustafson (1969). The Concentration of Lead in Human Bone by R. B. Holtzman, H. F. Lucas, Jr. and F. H. Ilcewicz. Annual Report, Radiological Physics Division, Argonne National Laboratory, 43 p.

RUHLING, A. and G. Tyler (1968). An Ecological Approach to the Lead Problem. Bot. Notiser 121:321.

ROSCOE, J. T. (1974). Fundamental Research Statistics for the Behavioral Sciences. Holt, Rinehart and Winston, Inc.

SANO, S. (1954). Studies on the Distribution of Lead in Animal Tissues. Japan J. Nation's Health (English Summary and Tables) 23:59.

SCHNITZER, M. (1968). Reactions Between Organic Matter and Inorganic Soil Constituents. Int. Congress of Soil Sci. 9:635.

SCHNITZER, M. (1968). Relations between Organic Matter and Inorganic Soil Constituents. 9th Int. Congress of Soil Sci. 1:635.

SCHROEDER, H. A. and H. Mitchener (1971). Toxic Effects of Trace Elements on the Reproduction of Mice and Rats. Archives of Environ. Health 23:102.

SCHUCK, E. A. and J. K. Locke (1970). Relationship of Automotive Lead Particulates to Certain Consumer Crops. Environ. Sci. Tech. 4:324.

SELANDER, S. and K. Cramer (1968). Determination of Lead in Blood by Atomic Absorption Spectrophotometry. Brit. J. Ind. Med. 25:139.

SELANDER, S. and K. Cramer (1968). Determination of Lead in Urine by Atomic Absorption Spectrophotometry. Brit. J. Ind. Med. 25:209.

SINGER, M. J. and L. Hanson (1969). Lead Accumulation in Soils near Highways in the Twin Cities Metropolitan Area. Soil Sci. Soc. Proc. 33:152.

SMITH, R. G. (1965). How Sensitive and How Appropriate Are Our Current Standards of "Normal and Safe" Body Content of Lead. Symposium on Enivornmental Lead Contamination, U. S. Public Health Service, Washington, D. C. No. 1440.

SMITH, W. S. and C. W. Gruber (1966). Atmospheric Emissions from Coal Combustion. An Inventory Guide, U. S. Department of Health, Education and Welfare, Washington, D. C. PB-170-851.

SPENCER, J. D. (1969). Review of Bureau of Mines Coal Program. Bureau of Mines, U. S. Department of the Interior, Washington, D. C.

STEEL, R. C. D. and J. H. Torrie (1960). Principles and Procedures of Statistics. With Special Reference to the Biological Sciences, McGraw-Hill Book Company, Inc.

STEVENS, B. J., J. B. Sanders and R. Stux (1972). Lead Determination in Blood and Urine by Atomic Absorption Spectroscopy. Varian Techtron.

STOPPS, G. J. (1968). Lead. In Proceedings on the Symposium on Air Qulaity Criteria. J. Occup. Med. 10:118.

STREHLOW, C. D. (1967). The Determination of Trace Metals in Bone by Atomic Absorption Spectrophotometry. AEC Report NYO-3086-7, Part V.

STREHLOW, C. D. (1969). Proc. 15th Ann. Bioassay Meeting, Los Alamos, New Mexico. LA-4271-MS.

STREHLOW, C. D. (1971). The Use of Deciduous Teeth as Indicators of Lead Exposure. Doctoral Thesis, Insitute of Environmental Medicine, New York University Medical Center, New York.

STRUEMPLER, A. W. (1975). Trace Element Composition in Atmospheric Particulates During 1973 and the Summer of 1974 at Chadron, Neb. Environ. Sci. Tech. 13:1164.

SWAINE, D. J. (1955). The Trace Element Content of Soils. Commonwealth Bur. Soil Sci. Tech Comm. No. 48:157.

SWANSON, V. E. and J. D. Vine (1972). Composition of Coal, Southwestern United States. Geol. Soc. America Abs. with Programs, Ann. Mtg. 7:683.

SWANSON, V. E., C. Huffman and J. C. Hamilton (1974). Composition and Trace Element Content of Coal, Northern Great Plains Area. Mineral Resources Work Group Report, U. S. Department of Interior, Open-file Report, 52 p.

Symposium on Plume Behavior (1966). Int. J. Air Water Pollut. 10:343.

TIDBALL, R. R., J. A. Erdman and R. J. Ebens (1974). Geochemical Baselines for Sagebrush and Soil, Powder River Basin, Montana-Wyoming. Geochemical Survey of the Western Coal Regions, U. S. Geological Survey, Open-file Report No. 74-250.

TOCA, F. M. (1972). Lead and Cadmium Distribution in the Particulate Elluent from a Coal-fired Boiler. PhD dissertation, University of Iowa.

TURK, A. (1974). Environmental Science. W. B. Saunders, Co., Philadelphia, Pa.

USAFETAC Project 8025 (1976). USAF Environmental Technical Applications Center (MAC), Scott Air Force Base, Ill.

VINOGRADOV, A. P. (1959). The Geochemistry of Rare and Dispersed Chemical Elements in Soils. Chapman and Hall, London.

VON HEHMDEN, D. J., R. H. Jungers and R. E. Lee, Jr. (1974). Determination of Trace Elements in Coal, Fly, Ash, Fuel Oil and Gasoline--A Preliminary Comparison of Selected Analytical Techniques. Anal. Che. 46(2):239.

WARREN, H. V. (1961). Some Aspects of the Relationship between Health and Geology. Can. J. Public Health 52:157.

WESTERMAN, M. P., E. Pfitzer, L. D. Ellis and W. N. Jensen (1965). Concentrations of Lead in Bone in Plumbism. New Eng. J. Med. 237:1246.