

Vista Chemical Company

900 Threadneedle
Houston, Texas 77079
(713) 588-3000

P.O. Box 19029
Houston, Texas 77224
Fax (713) 588-3236

ISG: JCL: ERT: MCH: AJO: RF
XF: ADA

February 8, 1990

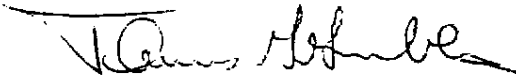
VISTA

Mr. Bob Green
Kemper National Insurance
P. O. Box 27367
Austin, TX 78755-2367

Dear Bob:

Dr. Drumwright asked that I provide you with a listing of the articles we recently accumulated on PVC/VCM workers and brain tumors. Attached is a listing of the articles. I've also enclosed a copy of the bibliography from the draft ATSDR toxicological profile on VCM. This has complete literature references. Please call me at 713-588-3445 if you would like further information on the attached.

Sincerely,



Thomas G. Grumbles, C.I.H.
Environmental Quality Manager

dlj

Attachment

cc: J. R. Drumwright

VVV 000023488

TGG MEDICAL ARTICLES

TGG1.	06/75	Copy of an article titled "Proportional Mortality among Vinyl Chloride Workers*"
TGG2.	1976	Copy of an article titled "Occupational Carcinogenesis"
TGG3.	10/76	Copy of an article titled "Mortality and Cancer Morbidity in a Group of Swedish VCM and PCV Production Workers"
TGG4.	1977	Copy of an article titled "The effect of zinc and pH on the behavior of δ-aminolevulinic acid dehydratase activity in baboons exposed to lead"
TGG5.	03/79	Copy of an article titled "Mortality Experience of Workers in a Vinyl Chloride Monomer Production Plant"
TGG6.	05/79	Copy of an article titled "An Association of Upper Respiratory Cancer with Exposure to Diethyl Sulfate"
TGG7.	1979	Copy of an article titled "ONE-YEAR TIME-SEQUENCE INHALATION TOXICITY STUDY OF VINYL CHLORIDE IN RATS. II. MORPHOLOGICAL CHANGES IN THE RESPIRATORY TRACT, CERUMINOUS GLANDS, BRAIN, KIDNEYS, HEART AND SPLEEN*"
TGG8.	10/81	Copy of an article titled "Excess Lung Cancer Risk in a Synthetic Chemicals Plant"
TGG9.	10/81	Copy of an article titled "Carcinogenicity Bioassays of Vinyl Chloride Monomer: A Model of Risk Assessment on an Experimental Basis"
TGG10.	1982	Copy of an article titled "BRAIN TUMORS IN THE CHEMICAL INDUSTRY"
TGG11.	01/83	Copy of an article titled "Mortality From Brain Tumor and Other Causes in a Cohort of Petrochemical Workers"
TGG12.	04/83	Copy of an article titled "A Cohort Mortality Study of Petrochemical Workers"
TGG13.	04/83	Copy of an article titled "Mortality Study of Workers in the Manufacture of Vinyl Chloride and its Polymers*"
TGG14.	04/83	Copy of an article titled "A Case-Control Study of Chemical Exposures and Brain Tumors in Petrochemical Workers"
TGG15.	1984	Copy of an article titled "Incidence of cancer among vinyl chloride and polyvinyl chloride workers"

TGG16. 1986 Copy of an article titled "Occupational risk factors for brain tumors"

TGG17. 03/17/86 Copy of a memo to Vinyl Chloride Panel and Research Coordinator Member from Has Shah, CMA re: enclosed "Register of Cases of Angiosarcoma of the Liver Due to exposure to Vinyl Chloride" and "Occupational Exposure and Brain Tumors"

TGG18. 10/27/86 Copy of a memo to Vinyl Chloride Panel and Research Coordinator Group from K. Rosica, CMA re: Final Report on Epidemiologic Study of Vinyl Chloride Workers

TGG19. 11/87 Draft Toxicological Profile on: Vinyl chloride

TGG20. 1988 Copy of an article titled "A mortality study of vinyl chloride monomer workers employed in the United Kingdom in 1940 - 1974"

TGG21. 12/88 Draft "Cohort and Case-Control Analyses of Workers Exposed to Vinyl Chloride - An Update"

TGG22. 04/89 ENSR manual titled "A Review of Cancer Epidemiology in Louisiana"

TGG23. 04/14/89 Toxicological Profile for 1,2-Dichloroethane - Draft For Public Comment

VVV 000023490

10. REFERENCES

- ACGIH (American Conference of Governmental Industrial Hygienists). 1986a. Documentation of the Threshold Limit Values and Biological Exposure Indices, 5th ed. Cincinnati, OH: ACGIH; 623-626.
- ACGIH (American Conference of Governmental Industrial Hygienists). 1986b. Threshold Limit Values for Chemical Substances in the Work Environment Adopted by ACGIH with Intended Changes for 1986-87. Cincinnati, OH: ACGIH; 33.
- Amoore JE, Hautala E. 1983. Odor as an aid to chemical safety: Odor thresholds compared with threshold limit values and volatilities for 214 industrial chemicals in air and water dilution. J Appl Toxicol; 3:272-290.
- Anderson D, Richardson CR. 1981. Issues relevant to the assessment of chemically induced chromosome damage in vivo and their relationship to chemical mutagenesis. Mutat Res; 90:261-272.
- Anderson D, Hodge MCE, Purchase IFH. 1976. Vinyl chloride: dominant lethal studies in male CD-1 mice. Mutat Res; 40:359-370.
- Anderson D, Richardson CR, Weight TM, Adams WG. 1980. Chromosomal analyses in vinyl chloride exposed workers. Results from analysis 18 and 42 months after an initial sampling. Mutat Res; 79:151-162.
- Andrews AW, Zawistowski ES, Valentine CR. 1976. A comparison of the mutagenic properties of vinyl chloride and methyl chloride. Mutat Res; 40:273-275.
- Ando M, Sayato Y. 1984. Studies on vinyl chloride migration into drinking water from polyvinyl chloride pipe and reaction between vinyl chloride and chlorine. Water Res; 18(3):315-318.
- APHA (American Public Health Association). 1985. AWWA (American Water Works Association)/WPCF (Water Pollution Control Federation). Standard Methods for the Examination of Water and Wastewater, 16th ed. Washington, DC: APHA; pp. 591-602.

*Key study

VVV 000023491

Baker LW, MacKay KP. 1985. Hazardous waste management. Screening models for estimating toxic air pollution near a hazardous waste landfill. J Air Pollut Control Assoc; 35(11):1190-1195.

Balkon J, Leary JA. 1979. An initial report on a comprehensive, quantitative, screening procedure for volatile compounds of forensic and environmental interest in human biofluids by GC/MS. J Anal Toxicol; 3:213-215.

Barbin A, Besson F, Perrard MH, et al. 1985a. Induction of specific base-pair substitutions in *E. coli* trpA mutants by chloroethylene oxide, a carcinogenic vinyl chloride metabolite. Mutat Res; 152:147-156.

Barbin A, Laib RJ, Bartsch H. 1985b. Lack of miscoding properties of 7-(2-oxoethyl)guanine, the major vinyl chloride-DNA adduct. Cancer Res; 45:2440-2444.

Baretta ED, Stewart RD, Mutchler JE. 1969. Monitoring exposures to vinyl chloride vapor; breath analysis and continuous air sampling. Am Ind Hyg Assoc J; 30:537. (Cited in Tarkowski 1984)

Barnes D, Bellin J, DeRosa C, et al. 1987. Reference Dose (RfD): Description and use in health risk assessments. Appendix A of the Integrated Risk Information System (IRIS). Washington, DC: Office of Health and Environmental Assessment, Office of Research and Development. EPA 600/8-86-0321.

Bartsch H. 1976. Predictive value of mutagenicity tests in chemical carcinogenesis. Mutat Res; 38:177-190.

Bartsch H, Malaveille C, Montesano R. 1975. Human, rat and mouse liver-mediated mutagenicity of vinyl chloride in *S. typhimurium* strains. Int J Cancer; 15:429-437.

Bartsch H, Malaveille C, Montesano R. 1976. The predictive value of tissue-mediated mutagenicity assays to assess the carcinogenic risk of chemicals. IARC Sci Publ; 12:467-491.

Berk PD. 1976. Vinyl chloride-associated liver disease. Ann Int Med; 84:717-731. (Cited in EPA 1985a)

*Bi W, Wang Y, Huang M, Meng D. 1985. Effect of vinyl chloride on testis in rats. Ecotox Environ Safety; 10(2):281-289.

Bogdanikowa B, Zawilska J. 1984. Immune complexes in the serum of patients occupationally exposed to vinyl chloride. Przegląd Lekarski; 41(3):253-257.

Bolt HM. 1986. Metabolic activation of vinyl chloride, formation of nucleic acid adducts and relevance to carcinogenesis. IARC Sci Publ; 70:261-268.

Bolt HM, Kappus H, Buchter A, Bolt W. 1976a. Disposition of (1,2-¹⁴C) vinyl chloride in the rat. Arch Toxicol; 35:153-162. (Cited in EPA 1985b)

Bolt HM, Kappus H, Kaufmann R, et al. 1976b. Metabolism of ¹⁴C-vinyl chloride in vitro and in vivo. INSERM Symposia Series, IARC Scientific Publications N 13. INSERM 52: 151-164.j

Bolt HM, Laib RJ, Kappus H, Buchter A. 1977. Pharmacokinetics of vinyl chloride in the rat. Toxicology; 7(2):179-188.

Bryen D, Engholm G, Englund A, Westerholm P. 1976. Mortality and cancer morbidity in a group of Swedish VCM and PCV production workers. Environ Health Perspect; 17:167-170. (Cited in EPA 1985b)

Buchancova J, Reznak I, Horak V, Altmann P, Svehlova L, Suchova E, Sramkova E. 1985. Scintigraphic pictures of the liver in workers after a long-term exposure to vinyl chloride. Pracov Lek; 37(6):190-194.

Buchter A, Bolt HM, Kappus H, Bolt W. 1977. Tissue distribution of 1,2-¹⁴C-vinyl chloride in the rat. Int Arch Occup Environ Health; 39(1):27-32. (German: English abstract)

Buchter A, Filser JG, Peter H, Bolt HM. 1980. Pharmacokinetics of vinyl chloride in the rhesus monkey. Toxicol. Lett; 6(1):33-36.

CMR (Chemical Marketing Reporter). 1986a. Chemical Profile: Vinyl Chloride. June 2, 1986. New York, NY: Schnell Pub. Co.

CMR (Chemical Marketing Reporter). 1986b. Chemical Profile: Polyvinyl Chloride. June 9, 1986. New York, NY: Schnell Pub. Co.

C&EN (Chemical and Engineering News). 1987. Key Chemicals: Vinyl Chloride. 65(1):10.

Chudy JC, Crosby NT. 1977. Some observations on the determination of monomer residues in foods. Food Cosmet Toxicol; 15:547-551.

Coniglio WA, Miller K, MacKeever D. 1980. The occurrence of volatile organics in drinking water. Criteria and Standards Division. Science and Technology Branch. Exposure Assessment Project.

Conkle JP, Camp BJ, Welch BE. 1975. Trace composition of human respiratory gas. Arch Environ Health; 30:290-295.

Conolly RB, Jaeger RJ. 1978. Effects of cysteine, diethylmaleate and trichloropropane oxide on acute vinyl chloride hepatotoxicity. Toxicol Appl Pharmacol; 45(1):338.

Conolly RB, Jaeger RJ. 1979. Acute hepatotoxicity of vinyl chloride and ethylene; modification by trichloropropane oxide, diethylmaleate, and cysteine. Toxicol Appl Pharmacol; 50:523-531.

Conolly RB, Jaeger RJ, Szabo S. 1978. Acute hepatotoxicity of ethylene, vinyl fluoride, vinyl chloride, and vinyl bromide after Aroclor 1254 pretreatment. *Exper Molec Pathol*; 28:25-33.

Cotruvo JA. 1985. Organic micropollutants in drinking water. *Sci Total Environ*; 47:7-26.

Cotti G, Balgimigli L, Mandrioli A, Maltoni C. 1983. Suitable models for long-term bioassays of therapeutic and toxic effects of antitumoral drugs: Brain tumors of neuronal cells and primitive bipotential precursors produced in Sprague-Dawley rats by vinyl chloride. *Dev Oncol*; 15:376-378.

Cowfer JA, Magistro AJ. 1983. Vinyl Chloride. In Kirk-Othmer *Encyclopedia of Chemical Technology*. Vol. 23. New York, NY: Wiley Interscience; 865-885.

Cowfer JA, Magistro AJ. 1985. Vinyl polymers: vinyl chloride. In Kirk-Othmer *Concise Encyclopedia of Chemical Technology*. New York, NY: John Wiley and Sons, Inc; 1229-1230.

Curry S, Rich S. 1980. *The Kline Guide to the Chemical Industry*. 4th ed., Fairfield, NY: Charles H. Kline and Co.

de Meester C, Duverger-van Bogaert M, Lambotte-Vandepaer M, et al. 1980. Mutagenicity of vinyl chloride in the Ames test. Possible artifacts related to experimental conditions. *Mutat Res*; 77:175-179.

Dinceva E, Kolev P, Dalbokova D. 1985. EEG changes in workers exposed to long-term combined effect of a mixture of organic solvents and vinyl chloride. *Khig Zdraveopaz*; 29(1):8-15. (Russian: English abstract)

Dinman BD, Cook WA, Whitehouse WM, Magnuson HJ, Ditchek T. 1971. Occupational acroosteolysis. I. An epidemiological study. *Arch Environ Health*; 22:61-73.

Doss M, Lange CE, Veltman G. 1984. Vinyl chloride-induced hepatic coproporphyrinuria with transition to chronic hepatic porphyria. *Klin Wochenschr*; 62(4):175-178.

*Dow Chemical Company. 1984. Summary of Report on Lifespan Oral Carcinogenicity Study of Vinyl Chloride in Rats. FYI-OTS-1084-0353IN. FYI-AX-1084-0353SU. (Cited in EPA 1985b)

Drevon C, Kuroki T. 1979. Mutagenicity of vinyl chloride, vinylidene chloride and chloroprene in V79 Chinese hamster cells. *Mutat Res*; 67:173-182.

Drew RT, Boorman GA, Haseman JK, McConnell EE, Busey WM, Moore JA. 1983. The effect of age and exposure duration on cancer induction by a known carcinogen in rats, mice, and hamsters. *Toxicol Appl Pharmacol*; 68:120-130.

Ducatman A, Hirschhorn K, Selikoff IJ. 1975. Vinyl chloride exposure and human chromosome aberrations. *Mutat Res*; 31:163-168.

Duprat P, Fabry JP, Gradiski D, Magadur JL. 1977. Metabolic approach to industrial poisoning: Blood kinetics and distribution of ^{14}C -vinyl chloride (VCM). *Acta Pharmacol Toxicol Suppl (Kbh)*; 41(1):142-143. (Cited in EPA 1985b)

Dyksen JE, Hess AF, III. 1982. Alternatives for controlling organics in groundwater supplies. *J Am Water Works Assoc*; 74:394-403.

Edmonds LD, Falk H, Nissim JE. 1975. Congenital malformations and vinyl chloride. *Lancet*; ii:1098.

Edmonds LD, Anderson CE, Flynt JW, James LM. 1978. Congenital central nervous system malformations and vinyl chloride monomer exposure: A community study. *Teratology*; 17:137-142.

Eisenreich SJ, Looney BB, Thornton JD. 1981. Airborne organic contaminants in the Great Lakes ecosystem. *Environ Sci Technol*; 15(1):30-38.

Elmore JD, Wong JL, Laumbach AD, Streips UN. 1976. Vinyl chloride mutagenicity via the metabolites chlorooxirane and chloroacetaldehyde monomer hydrate. *Biochem Biophys Acta*; 442(3):405-419. (Cited in EPA 1985b)

EPA. 1980. Ambient Water Quality Criteria Document for Vinyl Chloride. Cincinnati, OH: Environmental Criteria and Assessment Office. EPA 440/5-80-078. NTIS PB 81-117889.

EPA. 1982a. Methods for organic chemical analysis of municipal and industrial wastewater. Test Method: Purgeable halocarbons - method 601 and Purgeable - Method 624. EPA Report 600/4-82-057, Environmental Monitoring and Support Laboratory, EPA, Cincinnati, OH. pp. 601-1 to 601-10 and 624-1 to 624-12.

EPA. 1982b. Test Methods for Evaluating Select Waste. Physical/Chemical Methods. Method 8010 - Halogenated volatile organics. Office of Solid Waste and Emergency Response, EPA, Washington, DC. pp. 8010-1 to 8010-12.

EPA. 1982c. Emission standard for ethylene dichloride, vinyl chloride, and polyvinyl chloride. 40 CFR 61.65.

EPA. 1982d. Identification and listing of hazardous waste. 40 CFR 261, Append VIII.

EPA. 1984. Health Effects Assessment for Vinyl Chloride. Cincinnati, OH: Environmental Criteria and Assessment Office. EPA 540/1-86-036.

EPA. 1985a. Drinking Water Criteria Document for Vinyl Chloride. Washington, DC: Office of Drinking Water, EPA. NTIS PB86-118320.

EPA. 1985b. Health and Environmental Effects Profile for Chloroethene. Cincinnati, OH: Environmental Criteria and Assessment Office. ECAO-CIN-P155.

EPA. 1986. The Total Exposure Assessment Methodology (TEAM) Study. Final report. Washington, DC: Office of Research and Development, Environmental Monitoring Systems Division. RTI/2391/00-03 F.

EPA. 1987a. Vinyl Chloride Health Advisory. Draft. Washington, DC: Office of Drinking Water.

EPA. 1987b. Graphical Exposure Modelling System (GEMS). CLOGP. Online. Washington, DC: EPA, Office of Toxic Substances.

EPA. 1987c. National Primary Drinking Water Regulations - Synthetic Organic Chemicals; Monitoring for Unregulated Contaminants; Final rule. Federal Register; 52(130):25690-25717.

EPA. 1987d. Reportable Quantity Adjustments. Federal Register; 52(50):8140-8186.

Farkas DF. 1980. Food Processing. In Kirk-Othmer Encyclopedia of Chemical Technology, Vol. 11. New York, NY: John Wiley & Sons; pp. 180-181.

FDA (Food and Drug Administration). 1986. Proposed uses of vinyl chloride polymers. Federal Register; 51(22):4177-4185.

Feron VJ, Kroes R. 1979. One-year time-sequence inhalation toxicity study of vinyl chloride in rats. II. Morphological changes in the respiratory tract, ceruminous glands, brain, kidneys, heart and spleen. Toxicology; 13(2):131-141.

*Feron VJ, Speek AJ, Willems MI, Van Buttaum D, Groot AP. 1975. Observations on the oral administration and toxicity of vinyl chloride in rats. Food Cosmet Toxicol; 13(6):633-638.

Feron VJ, Spit BJ, Immel HR, Kroes R. 1979a. One-year time-sequence inhalation toxicity study of vinyl chloride in rats. III. Morphological changes in the liver. Toxicol; 13:143-154.

Feron VJ, Kruysse A, Til HP. 1979b. One-year time-sequence inhalation toxicity study of vinyl chloride in rats. I. Growth, mortality, haematology, clinical chemistry, and organ weights. Toxicol; 13:25-35.

*Feron VJ, Hendriksen CFM, Speek AJ, Til HP, Spit BJ. 1981. Lifespan oral toxicity study of vinyl chloride in rats. Food Cosmet Toxicol; 19(3):317-333.

Filser JG, Bolt HM. 1979. Pharmacokinetics of halogenated ethylenes in rats. Arch Toxicol; 42(2):123-136.

- Fishbein L. 1979. Potential halogenated industrial carcinogenic and mutagenic chemicals. I. Halogenated unsaturated hydrocarbons. *Sci Total Environ*; 11:111-161.
- Fox AJ, Collier PF. 1977. Mortality experience of workers exposed to vinyl chloride monomer in the manufacture of polyvinyl chloride in Great Britain. *Br J Ind Med*; 34:110.
- Funes-Cravioto F, Lambert B, Lindsten J, et al. 1975. Chromosome aberrations in workers exposed to vinyl chloride. *Lancet*; 1:459.
- Gedigk P, Muller R, Bechtelsheimer H. 1975. Morphology of liver damage among polyvinyl chloride production workers. A report on 51 cases. *Ann NY Acad Sci*; 246:279-285.
- Geryk E, Zudova Z. 1986. Vinyl chloride as occupational health hazard. *Pracov Lek*; 38(1):1-8. (Czech: English translation)
- Goodenkauf O, Atkinson JC. 1986. Occurrence of volatile organic chemicals in Nebraska groundwater. *Ground Water*; 24(2):231-233.
- Gordon SJ, Meeks SA. 1977. A study of gaseous pollutants in the Houston, Texas area. *AIChE Symp Ser*; 73:84-94.
- Gosselin RE, Smith RP, Hodge HC. 1984. *Clinical Toxicology of Commercial Products*, 5th ed. Baltimore, MD: Williams and Wilkins; p. II-166.
- Green T, Hathway DE. 1975. The biological fate in rats of vinyl chloride in relation to its oncogenicity. *Chem Biol Interact*; 11:545-562.
- Green T, Hathway DE. 1977. The chemistry and biogenesis of the S-containing metabolites of vinyl chloride in rats. *Chem Biol Interact*; 17:137-150.
- Green T, Hathway DE. 1978. Interactions of vinyl chloride with rat-liver DNA in vivo. *Chem Biol Interact*; 22:211-224.
- Greim H, Bonse G, Radwan Z, Reichert D, Henschler D. 1975. Mutagenicity in vitro and potential carcinogenicity of chlorinated ethylenes as a function of metabolic oxirane formation. *Biochem Pharmacol*; 24:2013-2017.
- Grimsrud EP, Rasmussen RA. 1975a. The analysis of chlorofluorocarbons in the troposphere by gas chromatography-mass spectrometry. *Atmos Environ*; 9:1010-1013.
- Grimsrud EP, Rasmussen RA. 1975b. Survey and analysis of halocarbons in the atmosphere by gas chromatography-mass spectrometry. *Atmos Environ*; 9:1014-1017.
- Guengerich FP, Watanabe PG. 1979. Metabolism of (^{14}C)- and (^{36}Cl)-labeled vinyl chloride in vivo and in vitro. *Biochem Pharmacol*; 28:589-596.

Guengerich FP, Crawford WM, Jr, Watanabe PG. 1979. Activation of vinyl chloride to covalently bound metabolites: Roles of 2-chloroethylene oxide and 2-chloroacetaldehyde. *Biochemistry*; 18:5177-5182.

Guengerich FP, Mason PS, Stott WJ, Fox TR, Watanabe PG. 1981. Roles of 2-haloethylene oxide and 2-haloacetaldehydes derived from vinyl bromide and vinyl chloride in irreversible binding to protein and DNA. *Cancer Res*; 41:4391-4398.

Gwinner LM, Laib RJ, Filser JG, Bolt HM. 1983. Evidence of chloroethylene oxide being the reactive metabolite of vinyl chloride towards DNA: comparative studies with 2,2'-dichlorodiethyl ether. *Carcinogenesis*; 4:1483-1486.

Halama J, Becker-Stone S, Halama JM. 1985. Das haemangiosarkom der bei arbeitern in der PVC-industrie and andere VC-bedingte erkrankungen mit angiologisch-dermatologischer, heptalogischer, radiologischer and neurologischer symptomatik. *Der Radiolog*; 25(1):22-29. (German: English abstract)

*Hansteen IL, Hillestad L, Thiis-Evensen E, Helldas SS. 1978. Effects of vinyl chloride in man: A cytogenetic follow-up study. *Mutat Res*; 51:271-278.

Harkov R, Kebbekus B, Bozzelli JW, Lioy PJ. 1983. Measurement of selected volatile organic compounds at three locations in New Jersey during the summer season. *J Air Pollut Control Assoc*; 33:1177-1183.

Harkov R, Kebbekus B, Bozzelli JW, Lioy PJ, Daisey J. 1984. Comparison of selected volatile organic compounds during the summer and winter at urban sites in New Jersey. *Sci Total Environ*; 38:259-274.

Harsch DE, Cronn DR, Slater WR. 1979. Expanded list of halogenated hydrocarbons measurable in ambient air. *J Air Pollut Control Assoc*; 29:975-976.

Hartmans S, Bont JAM, Tramper J, Luyben KChAM. 1985. Bacterial degradation of vinyl chloride. *Biotech Letters*; 7(6):383-386.

Hsnen E, Soininen V, Pyysalo H, Leppamaki E. 1979. On the occurrence of aliphatic chlorine and bromine compounds in automobile exhaust. *Atmos Environ*; 13:1217-1219.

Heath CW, Jr, Fable H, Creech JL, Jr. 1975. Characteristics of cases of angiosarcoma of the livers among vinyl chloride workers in the United States. *Ann NY Acad Sci*; 246:231-236.

Hefner RE, Jr, Watanabe PG, Gehring PJ. 1975a. Percutaneous absorption of vinyl chloride: *Toxicol Appl Pharmacol*; 34:529-532.

Hefner RE, Jr, Watanabe PG, Gehring PJ. 1975b. Preliminary studies of the fate of inhaled vinyl chloride monomer in rats. *Ann NY Acad Sci*; 246:135-148.

Heger M, Muller G, Norpath K. 1982. Untersuchungen zur Beziehung zwischen Vinylchlorid (VCM) - Aufnahmsine und Metabolitenausscheidung bei 15 VCM-Exponierten. *Int Arch Occup Environ Health*; 50:187. (Cited in Tarkowski 1984)

Hehir RM, McNamara BP, McLaughlin J, Jr, Willigan DA, Bierbower G, Hardisty JF. 1981. Cancer induction following single and multiple exposures to a constant amount of vinyl chloride monomer. *Environ Health Perspect*; 41:63-72.

Heldaas SS, Langard SL, Andersen A. 1984. Incidence of cancer among vinyl chloride and polyvinyl chloride workers. *Br J Ind Med*; 41:25-30.

*Hong CB, Winston JM, Thornburg LP, Lee CC. 1981. Follow-up study on the carcinogenicity of vinyl chloride and vinylidene chloride in rats and mice: Tumor incidence and mortality subsequent to exposure. *J Toxicol Environ Health*; 7:909-924.

HSDB (Hazardous Substances Data Bank). 1987. National Library of Medicine Report 169. Online: September 1987.

Huberman E, Bartsch H, Sachs I. 1975. Mutation induction in Chinese hamster V79 cells by two vinyl chloride metabolites, chloroethylene oxide and 2-chloroacetaldehyde. *Int J Cancer*; 16:639-644.

Hultmark D, Sundh K, Johansson L, Arrhenius E. 1979. Ethanol inhibition of vinyl chloride metabolism in isolated rat hepatocytes. *Chem Biol Interact*; 25(1):1-6.

IARC (International Agency for Research on Cancer). 1978. Methods for the measurement of vinyl chloride in poly(vinyl chloride), air, water, and foodstuffs. In *Environmental Carcinogens Selected Methods of Analysis*. Egan H, Squireel DCM, Thain W, Davis W, eds. IARC Sci Pub No 22.

IARC (International Agency for Research on Cancer). 1979. Monographs on the Evaluation of the Carcinogenic Risk of Chemicals in Humans. Vinyl chloride, polyvinyl chloride and vinyl chloride-vinyl acetate polymers. Lyons, France: WHO, IARC; 19:377-401; 419-438.

Infante PF. 1976. Oncogenic and mutagenic risks in communities with polyvinyl chloride production facilities. *Ann NY Acad Sci*; 271:49-57.

Infante PF, Wagoner JK, McMichael AJ, Waxweiler RJ, Falk H. 1976. Genetic risks of vinyl chloride. *Lancet* (April 3); 734-735.

Ives NF. 1975. Sensitive trapping and gas chromatographic method for vinyl chloride in air samples. *J Assoc Off Anal Chem*; 58:457-460.

Jaeger RJ, Reynolds ES, Conolly RB, Moslen MT, Szabo S, Murphy SD. 1974. Acute hepatic injury by vinyl chloride in rats pretreated with phenobarbital. *Nature*; 252(5485): 724-726.

Jaeger RJ, Murphy SD, Reynolds ES, Szabo S, Moslen MT. 1977. Chemical modification of acute hepatotoxicity of vinyl chloride monomer in rats. *Toxicol Appl Pharmacol*; 41:597-607.

Jedrychowski RA, Sokal JA, Chmielnicka J. 1984. Influence of exposure mode on vinyl chloride action. *Arch Toxicol*; 55(3):195-198.

Jenssen D, Ramel C. 1980. The micronucleus test as part of a short-term mutagenicity test program for the prediction of carcinogenicity evaluated by 143 agents tested. *Mutat Res*; 75:191-202.

John JA, Smith FA, Leong BKJ, Schwetz BA. 1977. The effects of maternally inhaled vinyl chloride on embryonal and fetal development in mice, rats, and rabbits. *Toxicol Appl Pharmacol*; 39:497-513.

Juhe VS, Lange CE, Stein G, Veltman G. 1974. Uber die sog. Vinylchloridkrankheit. *Berufs-Dermatosen*; 22:4-22. (German: English abstract)

Kappus H, Bolt HM, Buchter A, Bolt W. 1976. Liver microsomal uptake of [¹⁴C] vinyl chloride and transformation to protein alkylating metabolites in vitro. *Toxicol Appl Pharmacol*; 37:461-471.

Katsova LD, Pavlenko GI. 1985. Cytogenetic examination of the workers of chemical industry. *Mutat Res*; 147:301-302.

Keplinger ML, Goode JW, Gordon DE, Calandra JC. 1975. Interim results of exposure of rats, hamsters, and mice to vinyl chloride. *Ann NY Acad Sci*; 246:219-224.

Kilian DJ, Picciano DJ, Jacobson CB. 1975. Industrial monitoring: A cytogenic approach. *Ann NY Acad Sci*; 269:4-11.

Kontominas MG, Gupta C, Gilbert SG. 1985. Interaction of vinyl chloride with polyvinyl chloride in model food systems by HPLC chromatography: Migration aspects. *Lebensm-Wiss u-Technol*; 18(6):353-356.

Krajewski J, Dobecki M, Gromiec J. 1980. Retention of vinyl chloride in the human lung. *Br J Ind Med*; 37(4):373-374.

Krost KJ, Pellizzari ED, Walburn SG, Hubbard SA. 1982. Collection and analysis of hazardous organic emissions. *Anal Chem*; 54:810-817.

Kucerova M, Polivkova Z, Batora J. 1979. Comparative evaluation of the frequency of chromosomal aberrations and the SCE numbers in peripheral lymphocytes of workers occupationally exposed to vinyl chloride monomer. *Mutat Res*; 67:97-100.

Laib RJ, Bolt HM. 1977. Alkylation of RNA by vinyl chloride metabolites in vitro and in vivo: Formation of 1-N-6-ethenoadenosine. *Toxicology*; 8:185-195.

Laib RJ, Barbin A, Bartsch H. 1984. Evidence that vinyl chloride alters the fidelity of replication: Studies with chloroethylene oxide treated poly(dG-dC). Naunyn-Schmied Arch Pharmacol; 325(suppl): R17.

Laib RJ, Doeijer G, Bolt HM. 1985. Detection of N2, N-3-ethenoguanine in liver-DNA hydrolysates of young rats and after exposure of the animals to (¹⁴C) vinyl chloride. J Cancer Res Clin Onc; 109(2):A7.

*Lee CC, Bhandari JC, Winston JM, et al. 1977a. Inhalation toxicity of vinyl chloride and vinylidene chloride. Environ Health Perspect; 21:25-32.

Lee FI, Harry DS, Adams WG, Litchfield M. 1977b. Screening for liver disease in vinyl chloride workers. Br J Ind Med; 34:142-147.

Lee CC, Bhandari JC, Winston JM, House WB, Dixon RL, Woods JS. 1978. Carcinogenicity of vinyl chloride and vinylidene chloride. J Toxicol Environ Health; 4:15-30.

Lester D, Greenberg LA, Adams WR. 1963. Effects of single and repeated exposures of humans and rats to vinyl chloride. Am Ind Hyg Assoc J; 24:265-275.

Lilis R, Anderson H, Nicholson WJ, Daum S, Fischbein AS, Selikoff IJ. 1975. Prevalence of disease among vinyl chloride and polyvinyl chloride workers. Ann NY Acad Sci; 246:22-41.

Loprieno N, Barale R, Baroncelli S, et al. 1977. Induction of gene mutations and gene conversions by vinyl chloride metabolites in yeast. Cancer Res; 46:253-257.

Lyman WJ, Reehl WF, Rosenblatt DH. 1982. Handbook of Chemical Property Estimation Methods. Environmental Behavior of Organic Compounds. McGraw Hill Book Co., New York, NY. pp. 4-9.

Makarov IA. 1984. Sexual disorders in male workers occupationally exposed to methyl-methacrylate vinyl chloride. (Trans: 1-11) Gig Tr Prof Zabol; 6:19-23.

Makarov IA, Solovyeva MS, Gnelitsky GI. 1984. On sexual disorders in women chronically exposed to methylmethacrylate and vinyl chloride. Gig Tr Prof Zabol; 3:22-27 (Trans.)

Maltoni C, Lefemine G. 1975. Carcinogenicity bioassays of vinyl chloride. Current results. Ann NY Acad Sci; 246:195-218.

Maltoni C. 1977. Recent findings on the carcinogenicity of chlorinated olefins. Environ Health Perspect; 21:15.

VVV 000023501

*Maltoni C, Lefemine G, Ciliberti A, et al. 1980. Vinyl chloride carcinogenicity bioassays (BT project) as an experimental model for risk identification and assessment in environmental and occupational carcinogenesis. *Epidemiol Anim Epidemiol Hum: Cas Chlorure Vinyle Monomere* (Reun Club Cancerog Chim), 20th, Meeting Date 1979, pp. 11-112. Publ Essent, Paris, France.

*Maltoni C, Lefemine G, Ciliberti A, et al. 1981. Carcinogenicity bioassays of vinyl chloride monomer: A model of risk assessment on an experimental basis. *Environ Health Perspect*; 41:329.

Maltoni G, Cotti, Valgimigli L, Mandrioli A. 1983. Suitable models for long-term bioassays of the therapeutic and toxic effects of antitubercular drugs: Liver angiosarcomas produced in Sprague-Dawley rats by vinyl chloride. *Dev Oncol*; 15:339-341.

Markowitz SS, McDonald CJ, Fethiera W, Kerzner MS. 1972. Occupational acroosteolysis. *Arch Derm*; 106:219-223.

Marsteller HJ, Lebach WK, Muller R, Gedigk P. 1975. Unusual splenomegalic liver disease as evidenced by peritoneoscopy and guided liver biopsy among polyvinyl chloride production workers. *Ann NY Acad Sci*; 95:134.

Mastromatteo E, Fisher AM, Christie H, Danziger H. 1960. Acute inhalation toxicity of vinyl chloride to laboratory animals. *Am Ind Hyg Assoc J*; pp. 394-398.

MCA (Manufacturing Chemists Association). 1980. Letter regarding the study and report of effects of vinyl chloride. FYI-OTS-0480-0065. (Cited in EPA 1985b)

McCann J, Simmon V, Streitwieser D, Ames BN. 1975. Mutagenicity of chloroacetaldehyde, a possible metabolic product of 1,2-dichloroethane (ethylene dichloride), chloroethanol (ethylene chlorohydrin), vinyl chloride and cyclophosphamide. *Proc Nat Acad Sci USA*; 72(8):3190-3193.

McMurry JR, Tarr J. 1978. Vinyl chloride in Texas' ambient air. *Proc Ann Tech Meet - Inst Environ Sci*. pp. 149-155.

Micu D, Mihailescu E, Vilau C, Tarpa A, Chircu V, Zgoanta C. 1985. The value of some cytoenzymochemical investigations of the leukocytes and platelets in estimating the effects of occupational exposure to benzene, vinyl chloride, and carbon disulphide. *Rev Roum Med-Med Int*; 23(2):115-120.

Miller JJ, Beizer MB. 1985. Air quality in residences adjacent to an active hazardous waste disposal site. *APCA Annual Meeting*, June 16-21: pp. 2-17.

Mirkova E, Mihailova A, Nosko M. 1978. Embryotoxic and teratogenic effects in vinyl chloride. (Trans: 1-6) *Khig Zdraveopaz*; 21(5):440-443. (Bulgarian: English translation)

Monson RR, Peters JM, Johnson MN. 1975. Proportional mortality among vinyl chloride workers. *Environ Health Perspect*; 11:75-77.

Muller G, Norpoth K, Wickrama-Singhe RH. 1979. An analytical method using GC-MS for the quantitative determination of urinary thiodiglycolic acid. *Int Arch Occup Environ Health*; 44:185-191.

Nicholson WJ, Hammond EC, Seidman H, Selikoff IJ. 1975. Mortality experience of a cohort of vinyl chloride-polyvinyl chloride workers. *Ann NY Acad Sci*; 246:225-230.

NIOSH (National Institute for Occupational Safety and Health). 1975. Recommended Standard...Occupational Exposure to Vinyl Chloride. NTIS PB-246-691. (Cited in EPA 1985b)

NIOSH (National Institute of Occupational Safety and Health). 1984. NIOSH Manual of Analytical Methods. 3rd ed. Vol. 2. Vinyl chloride in air. Method No. 1007, Washington, DC: U.S. Government Printing Office; pp. 1007-1 to 1007-4.

NTIS (National Technical Information Service). 1987. Federal Research in Progress. Online: September 28, 1987.

OSHA (Occupational Safety and Health Administration). 1983. OSHA Safety and Health Standards. 29 CFR 1910.1017. pp. 670-671.

Oster RH, Carr CJ, Krantz JC. 1947. Anesthesia XXVII. Narcosis with vinyl chloride. *Anesthesiology*; 8:359-361.

Osterman-Golkar S, Jultmark D, Segerback D, et al. 1977. Alkylation of DNA and proteins in mice exposed to vinyl chloride. *Biochem Biophys Res Comm*; 76:259-266.

Page GW. 1981. Comparison of groundwater and surface water for patterns and levels of contamination by toxic substances. *Environ Sci Technol*; 15:1475-1481.

Patty FA, Yapt WP, Waite CP. 1930. Acute response of guinea pigs to vapors of some new commercial organic compounds. V. Vinyl chloride. *Pub Health Reports*; 45:1963-1971.

Pellizzari ED, Erickson MD, Zweidinger RA. 1979. Formulation of preliminary assessment of halogenated organic compounds in man and environmental media. Research Triangle Park, NC: Environmental Protection Agency. EPA/560/13-79-006.

Perticoni GF, Abbritti G, Cantisani TA, Bond L, Mauro L. 1986. Polyneuropathy in workers with long exposure to vinyl chloride. Electro-physiological study. *Electromyog Clin Neurophysiol*; 26(1):41-47.

Poncelet F, de Meester C, Duverger-van Bogaert M, et al. 1980. Influence of experimental factors on the mutagenicity of vinylic monomers. *Arch Toxicol Suppl*; 4:63-66.

VVV 000023503

Popper H, Thomas LB. 1975. Alterations of liver and spleen among workers exposed to vinyl chloride. *Ann NY Acad Sci*; 246: 172-194.

Preston BJ, Jones KL, Grainger RG. 1976. Clinical aspects of vinyl chloride disease. *Proc Soc Med*; 69:284-306.

Purchase IFH, Richardson CR, Anderson D. 1975. Chromosomal and dominant lethal effects of vinyl chloride. *Lancet*; 410-411.

Purchase IF, Richardson CR, Anderson D, et al. 1978. Chromosomal analysis in vinyl chloride exposed workers. *Mutat Res*; 57:325-334.
(Cited in Anderson et al. 1980)

Ramsey JD, Flanagan RJ. 1982. Detection and identification of volatile organic compounds in blood by headspace gas chromatography as an aid to the diagnosis of solvent use. *J Chromatogr*; 240:423-444.

Rannug U, Johansson A, Ramel C, Wachtmeister CA. 1974. The mutagenicity of vinyl chloride after metabolic activation. *Ambio*; 3:194-197

Rannug U, Gothe R, Wachtmeister CA. 1976. The mutagenicity of chloroethylene oxide, chloroacetaldehyde, 2-chloroethanol and chloroacetic acid, conceivable metabolites of vinyl chloride. *Chem Biol Interact*; 12:251-263.

Rasmussen RA, Harsch DE, Sweany PH, Krasnec JP, Cronn DR. 1977. Determination of atmospheric halocarbons by a temperature-programmed gas chromatographic freeze-out concentration method. *J Air Pollut Control Assoc*; 27:579-581.

Reding R. 1987. Chromatographic monitoring methods for organic contaminants under the Safe Drinking Water Act. *J Chromatogr Sci*; 25:338-344.

Reynolds ES, Moslen MT, Szabo S, et al. 1975. Hepatotoxicity of vinyl chloride and 1,1-dichloroethylene. *Am J Pathol*; 81:219-231.

Sabadie N, Malaveille C, Camus AM, Bartsch H. 1980. Comparison of the hydroxylation of benzo(a)pyrene with the metabolism of vinyl chloride, n-nitrosomorpholine, and n-nitroso-n'-methyldipiperazine to mutagens by human and rat liver microsomal fractions. *Cancer Res*; 40(1):119-126.

Sabljić A. 1984. Prediction of the nature and strength of soil sorption of organic pollutants by molecular topology. *J Agric Food Chem*; 32:243-246.

Sakabe H. 1975. Bone lesions among polyvinyl chloride production workers in Japan. *Ann NY Acad Sci*; 246:78.

Sal'nikova LS, Kitsovskaya IA. 1980. Effect of vinyl chloride on embryogenesis of rats. (Trans: 1-7) *Gig Tr Prof Zabol*; (3):46-47.

Salkind AJ, Pearlman E. 1978. Batteries, secondary (alkaline cells). In Kirk-Othmer Encyclopedia of Chemical Technology. Vol. 3. New York, NY: John Wiley & Sons; p. 605.

SANSS (Structure and Nomenclature Search System). 1987. Chemical Information Systems. Online: September 1987.

Sax NI, Ed. 1984. Dangerous Properties of Industrial Materials. 6th ed. New York: Van Nostrand Reinhold Co.; p. 2728.

Sax NI, Lewis RJ, Eds. 1987. Hawley's Condensed Chemical Dictionary. 11th ed. New York: Van Nostrand Reinhold Co.; p. 1223.

Shahin MM. 1976. The nonmutagenicity and recombinogenicity of vinyl chloride in the absence of metabolic activation. *Mutat Res*; 40:269-272.

Simmon VF, Kauhanen K, Tardiff RG. 1977. Mutagenic activity of chemicals identified in drinking water. *Proc Second Int Conf Environ Mutagens*, Edinburgh, July 11-15, 1977. *Progress in Genetic Toxicology*. Elsevier/North Holland Biomedical Press, Amsterdam. pp. 249-258.

Shu P, et al. 1986. Study on excretine regularity of thiodiglycolic acid in urine of vinyl chloride-exposed workers. *Chin J Prev Med*; 20(2):87-89.

Singley JE. 1984. Water (Municipal Treatment). In Kirk-Othmer Encyclopedia of Chemical Technology Vol. 24:387.

Sittig M. 1985. Handbook of Toxic and Hazardous Chemicals and Carcinogens. 2nd ed. Park Ridge, NJ: Noyes Publications; pp. 918-921.

Smith LR, Dragun J. 1984. Degradation of volatile chlorinated aliphatic priority pollutants in groundwater. *Environ Internat*; 10(4):291-298.

Stephens RD, Ball NB, Mar DM. 1986. A multimedia study of hazardous waste landfill gas migration. In *Pollutants in a Multimedia Environment*. Y Cohen, ed. New York, NY: Plenum Press; pp. 265-287.

Stuart JD. 1983. Organics transported thru selected geological media: Assessment of organics transported away from industrial waste disposal sites. *Comm Univ Storrs Inst of Water Resources*. NTIS PB83-224246; pp. 1-10.

Styles JA. 1977. A method for detecting carcinogenic organic chemicals using mammalian cells in culture. *Br J Cancer*; 36(5):558-563. (Cited in EPA 198ba)

Suzuki Y. 1978. Pulmonary tumors induced in mice by vinyl chloride monomer. *Environ Res*; 16:285-301.

Suzuki Y. 1981. Neoplastic and nonneoplastic effects of vinyl chloride in mouse lung. *Environ Health Perspect*; 41:31-32.

Suzuki Y. 1983. Nonneoplastic effect of vinyl chloride in mouse lung-- lower doses and short-term exposure. Environ Res; 32:91-103.

Tabershaw IR, Gaffey WR. 1974. Mortality study of workers in the manufacture of vinyl chloride and its polymers. J Occup Med; 16(8):509-518.

Tamburro CH. 1984. Relationship of vinyl monomers and liver cancers: angiosarcoma and hepatocellular carcinoma. Sem Liver Dis, May 1984. 4(2):158-169.

Tamburro CH, Makk L, Popper H. 1984. Early hepatic histologic alterations among chemical (vinyl monomer) workers. Hepatology; 4:413-418.

Tarkowski S. 1984. Preventive measure against occupational hazards in the PVC production industry. Prog Clin Biol Res; 141:177-189.

Theriault G, Iturra H, Gingras S. 1983. Evaluation of the association between birth defects and exposure to ambient vinyl chloride. Teratology; 27:359-370.

*Til HP, Immel HR, Feron VJ. 1983. Lifespan oral carcinogenicity study of vinyl chloride in rats. Final report. Civo Institutes, TNO. Report No. V 93.285/291099. (Cited in EPA 1985a, 1987b)

Torkelson TR, Oygen F, Rowe VK. 1961. The toxicity of vinyl chloride as determined by repeated exposure of laboratory animals. Am Ind Hyg Assoc J; 22:354-361.

Umana M, Warner M, Sheldon LS. 1985. Methods for sampling and analysis of breath. EPA/600/8-85/019 and NTIS PB85-243277.

Ungvary G, Hudak A, Tatrai E, Lorincz M, Folly G. 1978. Effects of vinyl chloride exposure alone and in combination with trypan blue applied systematically during all thirds of pregnancy on the fetuses of CFY rats. Toxicology; 11(1):45-54.

Vaino H. 1978. Vinyl chloride and vinyl benzene (styrene) - Metabolism, mutagenicity, and carcinogenicity. Chem Biol Interact; 22:117-124.

van Sittert NJ, de Jong G. 1985. Biomonitoring of exposure to potential mutagens and carcinogens in industrial populations. Food Chem Toxic; 23(1):23-31.

Verburgt FG, Vogel E. 1977. Vinyl chloride mutagenesis in *Drosophila melanogaster*. Mutat Res; 48:327-336.

Verschueren K. 1983. Handbook of Environmental Data on Organic Chemicals, 2nd ed. New York, NY: Van Nostrand Reinhold Company; pp. 1185-1186.

- Viola PL, Bigotti A, Caputo A. 1971. Oncogenic response of rat skin, lungs, and bones to vinyl chloride. *Cancer Res*; 31:516-522. (Cited in EPA 1985b).
- Wakeham IB, Johnson HR. 1978. Vinyl chloride formation from the thermal degradation of poly(vinyl chloride). *Polymer Eng Sci*; 18(5):404-407.
- Wallace LA, Pellizzari E, Hartwell T, et al. 1984. Personal exposure to volatile organic compounds. *Environ Res*; 35:293-319.
- Wallis AA, Holmberg B. 1984. Induction of single-strand breaks in DNA of mice after inhalation of vinyl chloride. *Cancer Lett*; 25:13-18.
- Wang T, Lenahan R, Kanik M. 1985. Impact of trichloroethylene-contaminated groundwater discharged to the main canal and Indian River Lagoon, Vero Beach, Florida. *Bull Environ Contam Toxicol*; 34:578-586.
- Ward AM, Undoon S, Watkins J, Walker AE, Drake CS. 1976. Evidence of an immune complex disorder in vinyl chloride workers. *Proc Roy Soc Med*; 69:289-290.
- Watanabe PG, Gehring PJ. 1976. Dose-dependent fate of vinyl chloride and its possible relationship to oncogenicity in rats. *Environ Health Perspect*; 17:145-152.
- Watanabe PG, McGowan GR, Gehring PJ. 1976a. Fate of [^{14}C] vinyl chloride after single oral administration. *Toxicol Appl Pharmacol*; 36(2):339-352.
- Watanabe PG, McCowan GR, Madrid EO, Gehring PJ. 1976b. Fate of [^{14}C] vinyl chloride following inhalation exposure in rats. *Toxicol Appl Pharmacol*; 37:49-59.
- Watanabe PG, Zempel JA, Pegg DG, Gehring PJ. 1978a. Hepatic macromolecular binding following exposure to vinyl chloride. *Toxicol Appl Pharmacol*; 44(3):571-579.
- Watanabe PG, Zempel JA, Gehring PJ. 1978b. Comparison of the fate of vinyl chloride following single and repeated exposure in rats. *Toxic Appl Pharmacol*; 44:391-399.
- Waxweiler RJ, Stringer W, Wagner JK, Jones J, Falk H, Carter C. 1976. Neoplastic risk among workers exposed to vinyl chloride. *Ann NY Acad Sci*; 271:40-48.
- Waxweiler RJ, Falk H, McMichael A, Mallov JS, Grivas AS. 1977. A cross-sectional epidemiologic survey of vinyl chloride workers. NTIS PB274193.
- Westrick JJ, Mello JW, Thomas RF. 1984. The groundwater supply survey. *J Am Water Works Assoc*; 76:52-59.
- Wilson JT, Wilson BH. 1985. Biotransformation of trichloroethylene in soil. *Appl Environ Microbio*; 49:242-243.

Wilson RH, McCormick WE, Tatum CF, Creech JL. 1967. Occupational acro-osteolysis report of 31 cases. JAMA; 201:577-580.

Withey JR. 1976. Pharmacodynamics and uptake of vinyl chloride monomer administered by various routes to rats. J Toxicol Environ Health; 1:381-394.

Young P, Parker A. 1984. Vapors and odors and toxic gases from landfills. In Hazardous and Industrial Waste Management and Testing: Third Symposium. ASTM STP 851. LP Jackson, AR Rohlik, PA Conway, eds. American Society for Testing and Materials, Philadelphia, PA. pp. 24-41.

Zuccato E, Mancucci F, Fanelli R and Mussini E. 1979. Head-space gas-chromatographic analysis of vinyl chloride monomer in rat blood and tissues. Xenobiotica; 9:27-31.