

LAW OFFICES
KELLER AND HECKMAN

1001 G STREET, N.W.
 SUITE 500 WEST
 WASHINGTON, D.C. 20001
 TELEPHONE (202) 434-4100
 TELEX 49 95551 "KELMAN"
 TELECOPIER (202) 434-4646

BOULEVARD LOUIS SCHMIDT 87
 B-1040 BRUSSELS
 TELEPHONE 32(2) 732 52 80
 TELECOPIER 32(2) 732 53 92

JOSEPH E. KELLER
 JEROME N. HECKMAN
 WILLIAM N. BORGHESEAN, JR.
 MALCOLM D. HAGARTHUR
 WAYNE V. BLACK
 TERENCE D. JONES
 MARTIN W. BERCOVICI
 JOHN S. ELDRID
 WILLIAM L. KOVACS
 CAROLE C. HARRIS
 RAYMOND A. KOWALESKI
 MICHAEL F. MORRONE
 MARK FOX EVENS
 JOHN S. RICHARDS
 JEAN SAVIGNY
 JOHN S. DUBECK
 PETER L. DE LA CRUZ
 CHRISTINE M. GILL
 MELVIN S. GROZIN
 SHIRLEY S. FUJIMOTO
 LAWRENCE P. HALPRIN

RALPH A. SIMMONS
 PETER A. SUSER
 C. DOUGLAS JARRETT
 SHEILA A. MILLAR
 PATRICK J. HURD
 GEORGE G. HYSKO
 GAREN E. DODGE
 DAVID I. READER
 S. CRAIG TAUTFEST
 MARK A. SIEVERS
 MICHAEL R. BENNETT
 THOMAS R. MOUNTTEER
 DAVID S. SARVADI
 CATHERINE R. NIELSEN
 KRIS ANNE MONTEITH
 ELLIOT SELLOS
 MARK L. ITZKOFF
 JEAN-PHILIPPE MONTFORT
 JUSTIN P. MCCARTHY
 JEFFREY S. LANG
 ARCHIE L. HARRIS, JR.

BRIAN T. ASHBY
 T. PHILLIPS BECK
 ARTHUR S. GARRETT III
 RICK D. RHODES
 LESLIE E. SILVERMAN
 FRANK C. TORRES III
 BRYANT ROBINSON III
 JOSEPH M. SANDRI, JR.
 ELIZABETH F. NEWSBILL
 TANARA Y. DAVIS
 ROBERT H. G. LOCKWOOD
 CAROL MOORE TOTN
 JOAN C. SYLWAIN
 MARTHA PELLEGRINI
 BARRY J. OHLSON
 DONALD T. WURTH
 DAVID S. BERRY
 STEPHEN V. KENNEY
 S. DEBORAH ROSEN
 DAVID R. JOY

SCIENTIFIC STAFF
 DANIEL S. DIKLER, PH. D.
 CHARLES V. BREDER, PH. D.
 ROBERT A. MATHEWS, PH. D.
 JOHN P. MODDERMAN, PH. D.
 HOLLY NUTHIRE FOLEY
 JUSTIN C. POWELL, PH. D.
 JANETTE HOUR, PH. D.
 LESTER BORODINSKY, PH. D.
 TELECOMMUNICATIONS
 ENGINEER
 CHARLES F. TURNER

*NOT ADMITTED IN D.C.
 PRESIDENT BRUSSELS

WRITER'S DIRECT DIAL NUMBER

July 14, 1993

(202) 434-4141

Robert D. Luss, Esq.
 Occidental Chemical Company
 5005 LBJ Freeway, Suite 1800
 Dallas, TX 75244

Re: Vinyl Chloride Risk Factors

Dear Bob:

Following our conversation today, enclosed are the Federal Register notices underlying the Environmental Protection Agency's regulation of vinyl chloride under the Safe Drinking Water Act. I have also enclosed some comments and memos the vinyl chloride risk factors that may be of assistance to Bill Carroll in his efforts.

If I can be of any other assistance, please let me know. In my absence, please feel free to contact Craig Tautfest directly.

Cordially yours,

Peter L. de la Cruz

Enclosures

- EPA assumed no "no effect level"
- consider benign tumors
- 98% can picture lesion as tumors
- 2 ppb lowest level reliably measured
- I think it certain any meat with such low level
- EPA can issue variances, WHO if unreasonable threatening health
- 2 ppb considered "safe"
- Might the fall below - community water system

RECEIVED

JUL 15 1993

R. D. LUSS

000264.001

Factor of 100 included for additional precaution

Upper bound lifetime cancer risk = 10^{-5}

.0002 w/ proplastic nodules (?)

.06 w/o

conservative - EPA considers the "worst case"

EPA considers "safe" risk is 10^{-4} - 10^{-6} range -

Doesn't allow point of use remedies

seems to lean toward 0.005, but cutoff 0.002 was the same.

Calculation for 2 l/day, 70-yr life span

1990

In developing the AADI (0.06 mg/l) for effects other than carcinogenic

non-eff lev. = 1.2 mg/kg + 1000 safety factor

For these carcinogenic FX were developed from in bioassay
suggests that this study may be more appropriate

Refer to a draft CAG calculation using rats + ingestion