

November 8, 1999

Dear Admiral Zumwalt:

Enclosed is my computer readout of the studies concerning PCB/Difuran exposure in Taiwan (1979) and Japan (1968). NAS has not looked at these studies and the human injury caused by these chemicals is similar to dioxins. Difurans are essentially the same as dioxins but NAS does not want to implicate them.

*Serge Claxton*

TOXICITY/HUMAN

LAST NAME: Akagi

FIRST NAME: Kamihiro

TITLE: Ass of Blood Pressure & PCB Level in Yusho Patients.

JOURNAL: Environmental Health Perspectives, Vol. 59, 37-39, 1985.

CHEMICAL: PCB

H/A: Human

TOXICITY/HUMAN

LAST NAME: Alaluusua

FIRST NAME: Satu

TITLE: PCDDs & DFs via Mothers Milk May Cause Develop Defects in Childs Teeth.

JOURNAL: Env Tox and Pharm, Vol. 1, 193-197, 1996.

CHEMICAL: DD DF

H/A: Human

TOXICITY/HUMAN

LAST NAME: Chang

FIRST NAME: King Jen

TITLE: Studies of Patients W/PCB Poisoning.

JOURNAL: Res Comm in Chem Path & Phar, Vol. 30 (3), 547-554, Dec. 1980.

CHEMICAL: PCB

H/A: Human

DEVELOPMENTAL/REPRODUCTIVE

LAST NAME: Chao

FIRST NAME: Wen-Yuan

TITLE: Middle Ear Disease in Children Exp Prenatally to PCBs & PCDFs.

JOURNAL: Archives of Environmental Health, Vol. 52 (4), 257-262, July/Aug 1997.

CHEMICAL: PCB DF

H/A: Human

TOXICITY/HUMAN

LAST NAME: Chao

FIRST NAME: Wen-Yuan

TITLE: Middle Ear Disease in Children Exp Prenatally to PCBs & PCDFs.

JOURNAL: Archives of Environmental Health, Vol. 52 (4), 257-262, July/Aug 1997.

CHEMICAL: PCB DF

H/A: Human

NEUROLOGICAL

LAST NAME: Chen

FIRST NAME: Rong Chi

TITLE: PCB Poisoning: Corr of Sens & Motor Nerve Cond, Neu Sym & Blood Lev of DF

JOURNAL: Environmental Research, Vol. 37, 340-348, 1985.

CHEMICAL: PCB DF

H/A: Human

NEUROLOGICAL

LAST NAME: Chen

FIRST NAME: Yung-Jung

TITLE: Eff of Prenat Exp to PCBs on Neu Funct of Child: Neuropsy & Neurophy Stud

JOURNAL: Develop Med & Child Neurology, Vol. 36, 312-320, 1994.

CHEMICAL: PCB

H/A: Human

DEVELOPMENTAL/REPRODUCTIVE

LAST NAME: Chen

FIRST NAME: Yung-Jung

TITLE: Eff of Prenat Exp to PCBs on Neuro Funct of Child: Neuropsych & Neurophy

JOURNAL: Develop Med & Child Neurology, Vol 36, 312-320, 1994.

CHEMICAL: PCB

H/A: Human

NEUROLOGICAL

LAST NAME: Chen

FIRST NAME: Y.C.

TITLE: A Six Year Foll-Up of Behavoir & Act Dosorders in Taiwan Yu-Cheng Child.

JOURNAL: American Jour of Pub Hel, Vol. 84, 415-421, 1994.

CHEMICAL: PCB DF

H/A: Human

DEVELOPMENTAL/REPRODUCTIVE

LAST NAME: Chen

FIRST NAME: Y.C.

TITLE: A Six Year Follow-Up of Behaviour & Act Disorders in Taiwan Yu-Cheng Child.

JOURNAL: American Jour of Public Hel, Vol. 84, 415-421, 1994.

CHEMICAL: PCB DF

H/A: Human

DEVELOPMENTAL/REPRODUCTIVE

LAST NAME: Chen

FIRST NAME: Yung Cheng Joseph

TITLE: Cognitive Development of Yu-Cheng Children Prenatally Exposed to Heat Degraded PCBs.

JOURNAL: JAMA, Vol. 268 (22), 3213-3218, Dec. 9, 1992.

CHEMICAL: PCB

H/A: Human

NEUROLOGICAL

LAST NAME: Chen

FIRST NAME: Rong Chi

TITLE: Neurological Manifestations of Chronic PCB Poisoning.

JOURNAL: Proc Nac Acad Sci, Vol. 7 (2), 87-91, 1983.

CHEMICAL: PCB

H/A: Human

TOXICITY/HUMAN

LAST NAME: Chia

FIRST NAME: Lie-Chia

TITLE: Clinical & Electrophysiological Study of Patients With PCB Poisoning.

JOURNAL: Journal of Neurology, Neurosurg & Psychiatry, Vol. 48, 894-901, 1985.

CHEMICAL: PCB

H/A: Human

TOXICITY/HUMAN

LAST NAME: Gladen

FIRST NAME: Beth C.

TITLE: Urinary Porphy in Children Exp Transplac to Polyhalogen Arom in Taiwan.

JOURNAL: Archives of Environmental Health, Vol. 43 (1), 54-58, Jan/Feb. 1988.

CHEMICAL: PCB DF

H/A: Human

DEVELOPMENTAL/REPRODUCTIVE

LAST NAME: Guo

FIRST NAME: Y.L.

TITLE: Gender Rel Decr in Ravens Prog Matr Scor in Child Prenat Exp to PCB & Rel

JOURNAL: Bull Env Con Tox, Vol. 55, 8-13, 1995.

CHEMICAL: PCB DF

H/A: Human

DEVELOPMENTAL/REPRODUCTIVE

LAST NAME: Guo

FIRST NAME: YL

TITLE: Neuroendocrine Develop Eff in Child Exp In Utero to PCBs in Taiwan.

JOURNAL: Neurotoxicology, Vol. 16 (4), 752, 1995.

CHEMICAL: PCB

H/A: Human

NEUROLOGICAL

LAST NAME: Guo

FIRST NAME: Yueliang Leon

TITLE: Diff Cong of PCB/DF May Have Contrib to Diff Hel Outcomes in Yucheng Coh.

JOURNAL: Neurotoxicology and Teratology, Vol. 18 (3), 255-256, 1996.

CHEMICAL: PCB DF

H/A: Human

TOXICITY/HUMAN

LAST NAME: Guo

FIRST NAME: Yueliang Leon

TITLE: Diff Cong of PCB/DF May Have Contrib to Diff Hel Outcomes in Yucheng Coh.

JOURNAL: Neurotoxicology and Teratology, Vol. 18 (3), 255-256, 1996.

CHEMICAL: PCB DF

H/A: Human

DEVELOPMENTAL/REPRODUCTIVE

LAST NAME: Guo

FIRST NAME: Y.L.

TITLE: Musculoskeletal Change in Child Prenatal Exposure to PCB & Related Compounds.

JOURNAL: Journal of Toxicology and Environmental Health, Vol. 41, 83-93, 1994.

CHEMICAL: PCB DF

H/A: Human

TOXICITY/HUMAN

LAST NAME: Guo

FIRST NAME: Y.L.

TITLE: Musculoskel Chang in Child Prenat Exp to PCB & Related Compounds.

JOURNAL: Jour Tox & Env Health, Vol. 41, 83-93, 1994.

CHEMICAL: PCB DF

H/A: Human

TOXICITY/HUMAN

LAST NAME: Guo

FIRST NAME: Yueliang

TITLE: Chloracne, Goiter, Arthritis & Anemia Aft PCB Poisoning: 14 Year Foll-up.

JOURNAL: Environmental Health Perspectives, Vol. 107 (9), 715-719, Sept. 1999.

CHEMICAL: PCB DF

H/A: Human

NEUROLOGICAL

LAST NAME: Guo

FIRST NAME: Yueliang Leon

TITLE: Early Develop of Yu-Cheng Child Born 7 to 12 Year Aft Taiwan PCB Outbreak

JOURNAL: Chemosphere, Vol. 29 (9-11), 2395-2404, 1994.

CHEMICAL: PCB DF

H/A: Human

DEVELOPMENTAL/REPRODUCTIVE

LAST NAME: Guo

FIRST NAME: Yueliang Leon

TITLE: Early Develop of Yu-Cheng Child Born 7 to 12 Year Aft Taiwan PCB Outbreak

JOURNAL: Chemosphere, Vol. 29 (9-11), 2395-2404, 1994.

CHEMICAL: PCB DF

H/A: Human

TOXICITY/HUMAN

LAST NAME: Hirota

FIRST NAME: Yoshio

TITLE: Ass Betw Blood PCB Conc & Serum Triglycer Lev in Chron Yusho Patients.

JOURNAL: International Arch of Occ Env Health, Vol. 65, 221-225, 1993.

CHEMICAL: PCB

H/A: Human

TOXICITY/HUMAN

LAST NAME: Hsieh

FIRST NAME: Shu-Feng

TITLE: Cohort Stud on Mort & Exp to PCBs.

JOURNAL: Archives of Environmental Health, Vol. 51 (6), 417-424, Nov/dec 1996.

CHEMICAL: PCB

H/A: Human

DEVELOPMENTAL/REPRODUCTIVE

LAST NAME: Hsu

FIRST NAME: Shu-Tao

TITLE: Discovery & Epid of PCB Poison in Taiwan: Four Year Followup.

JOURNAL: Environmental Health Perspectives, Vol. 59, 5-10, 1985.

CHEMICAL: PCB

H/A: Human

TOXICITY/HUMAN

LAST NAME: Hsu

FIRST NAME: Shu-Tao

TITLE: Discovery & Epid of PCB Poison in Taiwan: Four Year Followup.

JOURNAL: Environmental Health Perspectives, Vol. 59, 5-10, 1985.

CHEMICAL: PCB

H/A: Human