December 23, 1998

MEMORANDUM

SUBJECT: Review of Triphenyltin Incident Reports
DP Barcode D251180, Chemical #083601, Reregistration Case #0099

FROM: Jerome Blondell, Ph.D., Health Statistician
       Chemistry and Exposure Branch 2
       Health Effects Division (7509C)  

       Monica F. Spann, M.P.H., Environmental Health Scientist
       Chemistry and Exposure Branch 2
       Health Effects Division (7509C)

THRU: Susan V. Hummel, Senior Scientist
       Chemistry and Exposure Branch 2
       Health Effects Division (7509C)

TO: Sarah Law, Chemist
    Risk Characterization and Analysis Branch
    Health Effects Division (7509C)

BACKGROUND

The following data bases have been consulted for the poisoning incident data on the active ingredient Triphenyltin (PC Code: 083601):

1) OPP Incident Data System (IDS) - reports of incidents from various sources, including registrants, other federal and state health and environmental agencies and individual consumers, submitted to OPP since 1992. Reports submitted to the Incident Data System represent anecdotal reports or allegations only, unless otherwise stated. Typically no conclusions can be drawn implicating the pesticide as a cause of any of the reported health effects. Nevertheless, sometimes with enough cases and/or enough documentation risk mitigation measures may be suggested.

2) Poison Control Centers - as the result of Data-Call-Ins issued in 1993, OPP received Poison Control Center data covering the years
1985 through 1992 for 28 organophosphate and carbamate chemicals. Most of the national Poison Control Centers (PCCs) participate in a national data collection system, the Toxic Exposure Surveillance System which obtains data from about 70 centers at hospitals and universities. PCCs provide telephone consultation for individuals and health care providers on suspected poisonings, involving drugs, household products, pesticides, etc.

3) California Department of Food and Agriculture (replaced by the Department of Pesticide Regulation in 1991) - California has collected uniform data on suspected pesticide poisonings since 1982. Physicians are required, by statute, to report to their local health officer all occurrences of illness suspected of being related to exposure to pesticides. The majority of the incidents involve workers. Information on exposure (worker activity), type of illness (systemic, eye, skin, eye/skin and respiratory), likelihood of a causal relationship, and number of days off work and in the hospital are provided.

4) National Pesticide Telecommunications Network (NPTN) - NPTN is a toll-free information service supported by OPP. A ranking of the top 200 active ingredients for which telephone calls were received during calendar years 1984-1991, inclusive has been prepared. The total number of calls was tabulated for the categories human incidents, animal incidents, calls for information, and others.

TRIPHENYL Tin REVIEW

I. Incident Data System

Please note that the following cases from the IDS do not have documentation confirming exposure or health effects unless otherwise noted.

Incident#708-1

A pesticide incident occurred in 1993, when a man was riding his bicycle on a road in between two fields and was exposed to triphenyltin. An airplane sprayed the fields with the chemical and did not shut off the sprayer when the plane crossed the road. No specific symptoms were mentioned. No further information on the disposition of the case was reported.

Incident#2391-1

A pesticide incident occurred in 1995, when an applicator, who was not wearing personal protective equipment, was exposed to triphenyltin when the inner pouch of a bag got caught in the outer bag when it was opened. The applicator was also exposed while cleaning out a strainer after applying the chemical to pecan trees.
The applicator experienced blistering on his arms. No further information on the disposition of the case was reported.

Incident#2551-1

A pesticide incident occurred in 1995, when a man and his thirty year old daughter ingested peas that were sprayed with triphenyltin that was applied to a nearby sugar beet field. The daughter experiences frequent seizures due to brain damage. Suffered from an automobile accident she was involved in when she was nine years old. She experienced two seizures the same night as exposure. The father and the daughter experienced nerve quivering. No further information on the disposition of the case was reported.

Incident#2796-93

A pesticide incident occurred in 1994, when an individual rode their bike past a field that was sprayed with triphenyltin and experienced a sore throat and headaches. No further information on the disposition of the case was reported.

Incident#3831-1

A pesticide incident occurred in 1996, when an aerial spraying of triphenyltin occurred within thirty feet of an office building that affected two workers. One worker experienced nasal irritation, coughing, chest tightness, headaches, weakness, and nausea. The other worker experienced headaches, stuffy nose, dry throat, and coughing. No further information on the disposition of the case was reported.

Incident#3951-1

A pesticide incident occurred in 1996, when a twenty-nine year old male was about to apply triphenyltin when the hose burst on his sprayer. Some of the product got in his eyes and mouth. He experienced facial numbness and was diagnosed with Bell's palsy. No further information on the disposition of the case was reported.

Incident#3951-2

A pesticide incident occurred in 1996, when an individual ingested triphenyltin and experienced abdominal pain, diarrhea, ataxia, and was in a coma for one and a half months. No further information on the disposition of the case was reported.

II. Poison Control Center Data - No Data
III. California Data - 1982 through 1995 - No Data

IV. National Pesticide Telecommunications Network

On the list of the top 200 chemicals for which NPTN received calls from 1984-1991 inclusively, triphenyltin was not reported to be involved in human incidents.

V. Conclusions

Relatively few incidents of illness have been reported due to triphenyltin.

VI. Recommendations

No recommendations can be made based on the few incident reports available.

cc: Correspondence
Triphenyltin file (chemical no.083601)
SRRD - Angel Chiri (7508C)

RDI: BRSrSci:SHummel: