



RECEIVED

2006 FEB 10 PM 1:05

The Dow Chemical Company
Midland, Michigan 48674
USA

1803 BUILDING
January 31, 2006

BEHQ-0106-16363

CERTIFIED MAIL--RETURN RECEIPT REQUESTED
7003 0500 0003 5791 8424

[CONTAINS NO CONFIDENTIAL BUSINESS INFORMATION]

Document Processing Center (7407M)
(Attn: TSCA Section 8(e) Coordinator)
Office of Pollution Prevention and Toxics
Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0001

Contain NO CBI

2006 FEB - 9 AM 11:42

RECEIVED

Re: 2,3,7,8-tetrachlorodibenzo-para dioxin
CASRN 1746-01-6

2,3,7,8-tetrachlorodibenzofuran
CASRN 51207-31-9



Dear Sir/Madam:

The following information is being submitted by The Dow Chemical Company (Dow) pursuant to current guidance issued by EPA indicating EPA's interpretation of Section 8(e) of the Toxic Substances Control Act. Dow has made no determination as to whether a significant risk of injury to health or the environment is actually presented by the findings.

Single doses of 30 mg/kg 2,3,7,8-tetrachlorodibenzo-para dioxin (TCDD) and 300 mg/kg 2,3,7,8-tetrachlorodibenzofuran (TCDF) were administered by oral gavage to groups of 5 intact and ovariectomized female C57BL/6 mice with 7-day observation with both intact and ovariectomized controls.

In a time-course study in intact mice, TCDD and TCDF produced cytoplasmic vacuolization in the periportal and midzonal regions. For TCDF, the vacuolization peaked 72 hours and was minimal by 168 hours; whereas in the TCDD-treated mice, vacuolization peaked at 72-120 hours and was still elevated at 168 hours. Cytoplasmic vacuolization was accompanied by individual cell necrosis and inflammatory cell accumulation for both compounds, with the maximum number of necrotic hepatocytes and/or inflammatory cell aggregates observed at 168 hours in the TCDD treated animals. At 168 hours, some



292623

TSCA Section 8(e) Coordinator)
January 31, 2006
Page 2

animals given TCDF and TCDD had slight centrilobular hypertrophy of hepatocytes. Similar observations were noted in the ovariectomized mice with the exception that a slight panlobular vacuolization was noted in some animals, which was not treatment-related.

No written report of these results is yet available. Questions may be addressed to the undersigned.

Sincerely,



Linda C. Burgert
PH: 989-636-1011
FAX: 989-638-9933
E-MAIL: lburgert@dow.com

Jt