UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

12 JUL 1991

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OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

MEMORANDUM

SUBJECT: RfD/Peer Review Report of Triasulfuron
CASRN 82097-50-5
EPA Chem No. 128985
Caswell File No. 861C
Reg. Group: New Chemical

FROM: George Z. Ghali, PhD G. Ghali
Science Analysis and Coordination Branch
Health Effects Division (H7509C)
and
Rick Whiting
Science Analysis and Coordination Branch
Health Effects Division (H7509C)

TO: Vicky Walters (PM25)
Registration Division (H7505C)

The Health Effects Division RfD/Peer Review Committee met on February 12, 1991 to evaluate data submitted in support of triasulfuron registration with particular emphasis on long term toxicity in rodent and non-rodent species, carcinogenicity in two species, developmental and reproductive toxicity.

The committee concluded that all the studies and their data evaluation records are acceptable. However, the Core classification of the rat chronic toxicity/carcinogenicity study will remain as supplementary until the additional information outlined in the body of this report are provided. The chemical did not cause developmental or reproductive toxicity in the species tested. The chemical is not oncogenic in both rats and mice under the testing conditions. On this basis the Committee classified triasulfuron as a Group E, evidence of none-carcinogenicity for humans.

The Committee upheld its previous decision of April 11, 1990 with regard to the RfD for triasulfuron. The RfD for this chemical was calculated to be 0.01 mg/kg/day, based on a NOEL of 1.2 mg/kg/day for centrilobular hepatocytomegaly in males observed in the mouse carcinogenicity study, using an uncertainty factor of 100.

A. Individual in Attendance

1. Peer Review Committee (Signature indicates concurrence with the peer review unless otherwise stated).

William Burnam

Reto Engler

Karl Baetcke

Marcia Van Gemert

Henry Spencer

Gary Burin

Stephen Dapson

George Ghali

Rick Whiting

2. Peer Review Members in Absentia (Committee members who were unable to attend the discussion; signatures indicate concurrence with the overall conclusions of the committee).

Esther Rinde

3. Scientific Reviewer (Committee or none-committee members responsible for data presentation; signatures indicate technical accuracy of panel report).

Marion Copley

B. Material Reviewed

The material available for review consisted of an RfD summary document and data evaluation records (DER's) of the following studies:

1. **Morrow, L. (1988). Oncogenicity study in mice with CGA-131036 technical, unpublished report prepared by American Biogenics Corporation, submitted to the Agency by Ciba-Geigy Corporation, report No. 410-1863, dated April 8, 1988, MRID No. 40728316, HED Doc. No. 007582.**

   Core Classification: Minimum Data

   Committee's conclusions and recommendations:

   The study report and the data evaluation records are acceptable. The chemical was tested at 10, 1000, 5000 and 10,000 ppm. The high dose tested is adequate for carcinogenicity assay (limit dose is 7,000 ppm in mice). The chemical is not considered carcinogenic under the test conditions. The treatment did not alter the spontaneous tumor profile in this strain of mice. The incidence of alveolar/bronchiolar adenomas in the lung was significantly ($p < 0.05$) increased in males receiving 10,000 ppm (28% compared to 12% in the concurrent control), but the combined incidence of alveolar/bronchiolar adenoma and carcinoma was not significantly different. Females exhibited a negative trend for lung adenomas. The histologic importance of the increased incidence of lung adenomas in males is equivocal because of the variability of tumors (12, 22, 22, 12 and 28 % in at 0, 10, 1000, 5000 and 10000 ppm respectively) and the lack of dose-response. Furthermore, the concurrent control incidence of 12% was considerably lower than the reported historical control incidence of American Biogenics with an upper range of 38% (distribution of individual studies was not available). At Hazleton Laboratories, an upper range of 24% was reported but with a distribution such that only 2 out of 9 studies had incidences considerably higher than the concurrent control. The Committee determined that the study meets the Core-minimum classification criteria. This study satisfies data requirement 83-2 (one species) of Subdivision F of the Pesticide Assessment Guideline.

2. **Morrow, L. (1987). Combined chronic toxicity and oncogenicity study in rats, unpublished report prepared by American Biogenics Corporation, submitted to the Agency by Ciba-Geigy Corporation, report No. 410-1864, dated July 26, 1987, MRID No. 407283-18, HED Doc. No. 007582.**

Core Classification: Supplementary Data

Committee's conclusions and recommendations:

The study report and the data evaluation records are acceptable. The chemical was tested at 10, 1000 and 6000 ppm. The high dose tested is adequate for carcinogenicity assay based upon decrease body weight gains of 18 and 28.7% in males and females respectively in the first 13 weeks of the study. No significance decrease was observed in mean food consumption. The dose selection in this study was based on the findings from a subchronic range findings study in the rat . The chemical is not considered carcinogenic under the testing conditions. Histopathological examinations revealed no increase in neoplastic or non-neoplastic lesions that can be considered treatment-related. However, the Committee agreed that the classification of the study should remain as Core-Supplementary until the issues raised by the respective HED Branch are addressed by the registrant. These issues include: explanation of final body weight discrepancy in table 1 and 2 as compared with table 13 and 14 of the study report, and lack of survival tabulation. Until these issues are satisfactorily addressed, the Agency will consider that data gaps exist for this chemical under series 83-1 and -2 (one species) of Subdivision F of the Pesticide Assessment Guideline.

3. **Salamon, c. (1987). Two-generation reproduction study in rats, unpublished report prepared by American Biogenics Corporation, submitted by Ciba-Geigy Corporation, report No. 450-2312, dated June 25, 1987, MRID No. 407283-17, HED Doc. No. 007582.**

Core Classification: Minimum Data

Committee's conclusions and Recommendations:

The study report and the data evaluation records are acceptable. The chemical is adequately tested. The chemical did not cause reproductive toxicity under the testing conditions. The study meets the Core-

minimum data criteria. This study satisfies data requirement 83-4 of Subdivision F of the Pesticide Assessment Guideline.

4. **Giese, P. (1986). Developmental toxicity study in the rabbit, unpublished report prepared and submitted to the Agency by Ciba-Geigy corporation, report No. 831259, dated June 20, 1986, MRID No. 40271949, HED Doc. No. 006601.**

   Core Classification: Minimum Data

   Committee's conclusions and recommendations:

   The study report and the data evaluation records are acceptable. The chemical is adequately tested and did not cause developmental toxicity under the test conditions in this species. The study meets the Core-minimum data criteria. This study satisfies data requirement 83-3 (one species) of Subdivision F of the Pesticide Assessment Guideline.

5. **Giese, P. (1986). Developmental toxicity study in the rat, unpublished report prepared and submitted by Ciba-Geigy Corporation, report No. 831258, dated February 6, 1986, MRID No. 40271948, HED Doc. 006601, 006883.**

   Core Classification: Minimum Data

   Committee's conclusions and recommendations:

   The study and the data evaluation records are acceptable. The chemical is adequately tested and did not cause developmental toxicity under the testing conditions in this species. The study meets the Core-minimum data criteria. This study satisfies data requirement 83-3 (one species) of Subdivision F of the Pesticide Assessment Guideline.

C. <u>RfD Determination</u>:

The Committee upheld its previous decision of April 11, 1990, with regard to the RfD for triasulfuron. The RfD for this chemical was calculated to be 0.01 mg/kg/day, based on a NOEL of 1.2 mg/kg/day for centrilobular hepatocytomegaly in males observed in the mouse carcinogenicity study, using an uncertainty factor of 100.

D. Conclusions and Recommendations:

All studies and their data evaluation records reviewed by the Committee, except the combined chronic toxicity/carcinogenicity study in the rat (83-1a and -2a), are considered acceptable.

The combined chronic toxicity/carcinogenicity study in the rat could be upgraded upon the receipt and evaluation of the information requested by the respective Tox Branch.

The Committee upheld its previous decision of April 11, 1990 with regard to the RfD for triasulfuron. The RfD for this chemical was calculated to be 0.01 mg/kg/day based on a NOEL of 1.2 mg/kg/day for centrilobular hepatocytomegaly in males observed in the mouse carcinogenicity study, using an uncertainty factor of 100.

CC: Penny Fenner-Crisp
Esther Saito