

Exhibit 30



Chevron Chemical Company

Richmond, California
July 14, 1982cc: D. Walker
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JUL 20 1982

REGISTRATION & REGULATORY
AFFAIRSPARAQUAT RPAR

RPAR TASK FORCE

Enclosed is the EPA Paraquat Decision Document. It reaches the conclusion that available data do not support a RPAR (p. 28) and therefore, paraquat will be returned to the re-registration process.

It will be several weeks before EPA officially publishes this document and makes formal transmission to Chevron. At that time, we expect them to make specific requests for additional data as indicated in the document. By then I will expect we will have completed a technical review to surface comments and questions. If needed, a meeting of our toxicologists with EPA will be arranged.

For your information, I have the following observations:

- . Reproductive Effects. The data reviewed did not include the multi-generation rat study submitted April 2, 1982.
- . Oncogenicity - Chronic Feeding. The Agency did not include the mouse lifetime study submitted December 10, 1981. The rat and dog studies being requested are well along and we expected to have Final Reports by early 1983.
- . Mutagenicity. We need toxicology review and recommendations regarding the request for point mutation and DNA damage tests.
- . Acute Inhalation. As above, we need input on the request for another rat study.
- . Subchronic Toxicity.
 - Note the requests for:
 - a) 21-Day rabbit dermal toxicity study.
 - b) Dermal absorption rate assessment study.
 - c) Field worker/applicator exposure study.
 - d) Investigation of face mask filtering capabilities. Seiber's published work; Akesson's recent study and the CTL exposure studies are not cited.

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I think it noteworthy that the document states: "Current paraquat labeling is explicit in directing those involved in mixing and loading in proper handling procedures." (p. 4), that the label is consistent with Agency regulations (p. 14) and that precautionary labeling is adequate for prevention of dermal acute toxicity (p. 29).

The Agency clearly intends that the emetic be added to our formulation (pp. 13, 29) and it is my understanding that will be accomplished for product produced for 1983 sales.



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LRS:df

Enclosure

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PARAQUAT
DECISION DOCUMENT

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July 1, 1982

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I. Introduction

Section 3(a) of the Federal Insecticide Fungicide and Rodenticide Act [FIFRA] requires all pesticide products to be registered by the Administrator of EPA before they may be sold or distributed. Section 6(b) of FIFRA authorizes the Administrator to issue a notice of intent to cancel the registration of a pesticide or to change its classification if it appears that the pesticide or its labeling "does not comply with the provisions of [FIFRA] or, when used in accordance with widespread and commonly recognized practice, generally causes unreasonable adverse effects on the environment." Thus the Administrator may cancel the registration of a pesticide whenever he or she determines that it no longer satisfies the statutory standard for registration, which requires, among other things, that the pesticide not cause "unreasonable adverse effects on the environment" [Section 3(c)(5) of FIFRA]. These "unreasonable adverse effects" are defined in Section 2(bb) of FIFRA to include "any unreasonable adverse effects to man or the environment, taking into account the economic, social and environmental costs and benefits of the use of any pesticide."

The Environmental Protection Agency, hereafter referred to as the Agency, created the Rebuttable Presumption Against Registration [RPAR] process to facilitate the identification of pesticide uses which may not satisfy the statutory standard for registration and to provide a public, informal procedure for the gathering and evaluation of information about the risks and benefits of these uses. The regulations governing the RPAR process are set forth in 54 CFR 162.11. These regulations set forth certain criteria of risk and provide that an RPAR shall arise against a pesticide if the Agency determines that the ingredient(s), metabolite(s), or degradation product(s) of the pesticide in question meet or exceed any of these risk criteria.

In administering the RPAR process, the Agency adheres to the standard for initiating the RPAR process established by Section 3(c)(8), one of the 1978 amendments to FIFRA, which provides that the Agency may not start an RPAR unless it has "a validated test or other significant evidence rising prudent concerns of unreasonable adverse risk to man or the environment."

When the Agency publishes a notice indicating that an RPAR has arisen, the regulations (40 CFR 162.11) require that an opportunity then be provided for registrants, applicants, and interested persons to submit evidence to rebut the presumption, or evidence relating to the economic, social, and environmental benefits for any use of the pesticide. If the presumptions of risk are not rebutted, the evidence on the benefits of the pesticide is evaluated and considered along with the information on the risks. The Agency then analyzes various methods of reducing the amount of risk from the pesticide together with their costs and determines whether the pesticide can be regulated so that the benefits of continued use outweigh the risks. If measures short of cancellation cannot reduce the risks associated with any given use of the pesticide to a level which is outweighed by benefits, the use in question must be cancelled.

Paraquat first came under intensive Agency review due to the widely held belief that neither an antidote nor a commonly accepted first aid treatment existed. In addition, paraquat's potential for exceeding 40 CFR 162.11 risk criteria in relation to both its dermal and inhalation toxicity was to be reviewed. The Federal Register Notice announcing the Agency's intent to initiate the scientific review of paraquat (43 FR 30613) cited

"...teratogenicity, lack of emergency treatment, chronic effects, reproductive effects, oncogenicity (data gap), mutagenicity (data gap) and acute effects" as areas of concern. Although the above noted criteria formed the primary concerns, the Agency additionally initiated a review of all available fish and wildlife data as well as those human health effect data not specifically addressed within 43 FR 30613.

This decision document is divided into five sections. Section I is this introduction. Section II discusses general information on the product's chemistry, uses, and tolerances. Section III addresses the primary purpose of the review; it compares data on potential adverse effects of paraquat with the Agency's criteria for a Rebuttable Presumption Against Registration. Section IV summarizes the conclusions of this review of paraquat and recommends actions to be taken as a result of these conclusions. Section V is a bibliographical listing of the studies cited.

potential. The Agency will, therefore, request submission of additional mutagenic test data. These data requests will include a mammalian in vitro point mutation test and a primary DNA damage test.

E. Lack of Emergency Treatment

As discussed earlier in this document, both the oral administration and skin absorption of paraquat have been responsible for poisoning incidents. As little as 1 teaspoon of paraquat can lead to interstitial fibrosis, respiratory failure and death. Following ingestion, several days elapse before dyspnea and several weeks before death. Histopathologic evaluation of the lung in fatal ingestion cases show several states of lung involvement. The primary process appears to consist of hemorrhage, edema, increased macrophages and bronchiolar damage. This is followed by septal thickening, fibrosis, increased fibroblasts and honey combing (Rebello and Mason, 1978). The Agency, however, believes that the therapeutic approach to treatment of acute oral exposure (Cavalli and Fletcher, 1977) has been demonstrated partially effective. The 81% survival rate occurring in those case histories available to the Agency in combination with the rapid availability of treatment information (provided by the placement of a Chevron Chemical Co. 24-hour emergency treatment telephone number on all labeling) suggests an adequate emergency treatment for accidental oral contamination. In addition, the Agency, on April 14, 1982, established an exemption from tolerance for an emetic which is to be incorporated into current paraquat formulations. This emetic is intended to induce rapid vomiting thereby reducing the absorption of paraquat. The Agency, therefore, does not believe that adequate grounds currently exist for the initiation of an RPAR action based upon the lack of emergency treatment for oral exposure.

Currently, no data are available with which to assess the adequacy of emergency treatment for dermal absorption of paraquat. The Agency has noted, however, that relatively few dermal exposure cases have resulted in fatalities. Paraquat products, with the exception of a homeowner use product containing a very low concentration of active ingredient, bear restricted use classification. Applicators of such products are required to undergo training in the safe handling and use of pesticides and receive instruction in product labeling and label interpretation. Current paraquat products bear labeling instructions for mixers and applicators in exposure reduction techniques. Those involved in mixing are instructed to "wear a full face shield, rubber gloves and apron" while applicators facing a risk of exposure are instructed to "wear goggles and approved face mask capable of filtering spray droplets." They are additionally instructed to "wear waterproof footwear and clothing when spraying or when contacting vegetation wet with spray." The Agency believes that the precautionary measures dictated by current labeling are adequate for the prevention of dermal acute toxicity. While reemphasizing that no data are available with respect to emergency treatment for dermal absorption, the Agency has concluded that an RPAR action would not appear warranted.