

Central Toxicology Laboratory

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Telephone Alderley Edge 2711

Dr R D Cavalli
Standard Oil Company of California
576 Standard Avenue
RICHMOND, California 94802
U S A

Your ref

Our ref

KF:EKW

Dear Dick

May I reply to the points raised in your letter of 9 July.

1. Superoxide dismutase. The Hammersmith are now pretty convinced that SOD is not beneficial. They have not published this (they never published that it was), but I believe they intend to do so. Since there is some residual doubt in view of the paper by Autor, then it might be advisable to sponsor some work along the lines you suggest and I would be very happy to see this done in the USA. Since I think it will probably be negative, I think the study should be limited to a simple question whether SOD is beneficial and can be measured on an LD50 basis, but I would leave the protocol to you. I enclose a copy of the Huntingdon experiment since I understand you did not receive a copy.

2. I think your best contact for experience with manufacturing problems would be the Medical Officer in charge of the plant here,

Dr T D Browne
Imperial Chemical Industries Ltd
Widnes Works
Pilkington-Sullivan Group
WIDNES, Lancs.

3. Work on dogs using haemoperfusion for paraquat poisoning was done at Strathclyde University and Glasgow Royal Infirmary. The work has been accepted for publication and will be available in a few months' time. Until then no details can be released but it does show that haemoperfusion will reduce the blood concentration of paraquat.

4. I am sorry not to be more helpful with your legal problems. To my knowledge, no-one here has followed up a case of recovered paraquat poisoning for more than a few weeks. I have not heard of delayed sequelae being attributed, rightly or wrongly, to paraquat. Due possibly to good publicity on our part, very few people here believe that paraquat causes any sort of problem in the field and we have the support of the official side. Consequently, any allegation of illness due to spraying

CHEVRON CHEMICAL CO. ORTHOD DIV. R & D DEPT.	
375	
Rte	Initial
1	J. H. Gensson
	J. Abell
	A. V. Dearman
	H. G. (Trache)
	G. R. Hawks
	L. A. Hillmann
	W. A. Lehigh
	D. F. Quisenberry
2	L. R. Steiner
	O. R. Vasch
1344 FAX	
477R FAX	
R & D FILES	



Imperial
Chemical
Industries
Limited

Date

21 July 75

Routing Slip 10-24

To: 11/4/75

From: FKK

Date: 11/3/75

Printed in U.S.A. GO-24 (DS-3-75)

Remarks: We used a trip report from RDC outlining the status of the items raised in K. Fletcher's letter of 7/21/75. JVO should request trip report from RDC.

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Dr R D Cavalli

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never reaches serious proportions and we have never had to defend this type of action. Also, since it is not believed that paraquat causes damage, there has been no study on long-term effects. This would be very difficult in an uncontrolled population.

As you say, there are sporadic reports of CNS effects in paraquat poisoning although I cannot recall any CNS pathology being found in other cases - apart from brain oedema and haemorrhage in a few cases. My impression is that paraquat does not affect the CNS to any significant extent, except in very large doses. Certainly injection of even small quantities into the brain is lethal, but I know of no described lesion. The only remotely connected complaint I have met is that of a peripheral neuritis after spraying. This has been alleged three or four times and is, I believe, coincidental.

5. As I believe was explained, we do not intend to do any further studies here on in vivo assessment of adsorbents. If you believe that various American materials should be tested, then I think it would be more appropriate for this to be done in the USA. My own feeling, as I explained in a previous note, was that anything was probably of some use but that the particular material used would depend on what was available rather than what was better.

I hope we can discuss these points more fully when you come; it is obvious that the American environment is giving you problems which we have not encountered here or elsewhere. I look forward to seeing you.

Best wishes,

Yours sincerely



K Fletcher

Enclosure

Case ID: 220300429

CUSA-00189806