Message

From: HEYDENS, WILLIAM F [FND/1000] [/O=MONSANTO/OU=NA-1000-01/CN=RECIPIENTS/CN=230737]

Sent: 2/19/2001 2:23:55 PM

To: 'ldkier@ REDACTED ' [ldkier@ REDACTED]

Subject: FW: meeting Prof Parry 15 Feb 2001

Larry, well, there you go

----Original Message----

From: MARTENS, MARK A [AG/5045]
Sent: Sunday, February 18, 2001 11:48 AM

To: HEYDENS, WILLIAM F [FND/1000]; GARNETT, RICHARD P [AG/5040]; FARMER, DONNA R [FND/1000]; 'Larry Kier'

Cc: GRAHAM, WILLIAM [AG/5040]
Subject: RE: meeting Prof Parry 15 Feb 2001

Bill,

Yes, I know.

I agreed with Larry that he could be available at the phone at 7.00 am mountain time (14h UK time). The meeting started off in a tense atmosphere because Parry was irritated by the language used in the mutagenicity section of the Williams et al. paper. He also found the rebuttals I sent to him (which were already cleared from defensive and dismissive statements, I couldn't include Larry's comments because they came too late) still too critical towards the literature data. Anyway it took us some time to turn the situation (he himself said that the Lioi et al. papers are possibly crap) and when it was time to call Larry I asked him several times to pick up the phone to continue the discussions with Larry but he didn't want to. The meeting took about 4 hours and at the end he suddenly said: "Shouldn't we call Larry?" I explained to him that Larry was there at 14 h but that it wouldn't make sense to call him 3 hours later. He then apologised and said that whenever Larry would like to call him that he could always do that. He also asked me to transfer his best regards to Larry, which is then done by this message.

The meeting ended in a very good atmosphere (see report from Richard).

Larry,

Sorry for the mess but I really couldn't help it. Thanks for being on stand-by.

We will certainly have to set up a conference call on this somewhere next week.

Regards, Mark.

-----Original Message-----

From: HEYDENS, WILLIAM F [FND/1000]
Sent: Friday, February 16, 2001 2:41 PM

To: GARNETT, RICHARD P [AG/5040]; FARMER, DONNA R [FND/1000]; MARTENS, MARK A [AG/5045]

Cc: GRAHAM, WILLIAM [AG/5040]
Subject: RE: meeting Prof Parry 15 Feb 2001

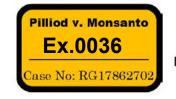
Richard,

Thank you for the summary. All things considered, it sounds like it went reasonably well. I suggest we all get together in the next couple of weeks to discuss further.

Why is Parry interested in testing MON 35050-minus-glyphosate? What parameters is he interested in? Note that the lab (Monsanto-EHL) and the people who did the original MON 35050 work are no longer available to us the lab is almost closed down now and the people have been scattered to the 4 corners of Pharmacia/Monsanto & beyond.

Larry Kier told me that he waited by the phone, but no call came - what happened?

Bill



----Original Message-----

From: GARNETT, RICHARD P [AG/5040]
Sent: Friday, February 16, 2001 7:03 AM

To: FARMER, DONNA R [FND/1000]; HEYDENS, WILLIAM F [FND/1000]; MARTENS, MARK A [AG/5045]

Cc: GRAHAM, WILLIAM [AG/5040]
Subject: meeting Prof Parry 15 Feb 2001

present: Prof Jim Parry, Swansea University Mark Martens, Richard Garnett

Overall tone of the meeting was positive after a negative start because Prof Parry found the tone of the Williams et al CANTOX paper to be very dismissive of other researchers work, and over defensive in its attitude. The presentation of the results of the MON 35050 study changed the mood because it clarified certain effects found in the Bolognesi and Peluso papers.

Since our previous discussions with him, Prof Parry had begun to comprehend the complexity and range of glyphosate formulations. We clarified this by reviewing the brands, formulations and surfactants used in Europe and the rest of the world. Then reviewed the mutagenicity studies available for the surfactants used in glyphosate formulations. We demonstrated with work undertaken since the previous discussion that structurally related surfactants (etheramines) do not directly cause genotoxicity.

There was considerable discussion of the capacity of surfactants to cause inflammatory responses, and consequent oxidative stress. From the discussion it became apparent the Prof Parry's group is involved in studying the biological relevance of oxidative damage, and its possible relationship with mutagenic events.

Results

- acceptance that glyphosate is not genotoxic
- broad agreement that genotoxic results in some studies with surfactants arose due to oxidative damage rather than direct genotoxicity
- recognition of the difference of toxicity between the intraperitoneal and oral routes, and that only oral, dermal and inhalation route are taken into consideration for classification in the EU
- acceptance of the low quality of the Lioi et al study
- accepted the argument that no repeat dose study should be necessary on the basis of the NTP data
- accepted that we as an industry cannot undertake testing of the surfactants which are the property of other suppliers.
- no longer requested any studies on the final formulation

<u>Actions</u>

- Prof Parry will try to access the raw data for the Lioi et al study because the published results were not consistent with those from other papers or with his expectations; he deferred his request for a repeat study until after review of these data
- forward BBA review of mutagenicity data from Addendum to Monograph
- send full text of the MON 35050 poster
- complete the MON 35050 study with an intraperitoneal injection of the MON 35035 formulation minus glyphosate
- consider supporting studentship to help Prof Parry in research programme on the biological significance of oxidative damage (via the UK BBRSC)