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2020 636-4982 95/02/06 10:44:03
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From: U246074 --S21VM Date and time 02/06/95 09:35:11
To: U077399 --S08VRNA BOND, GREGORY G. / U077632 --S08VRNA DILLON JR, GEORGE
U076129 --S21VM DOMORADZKI, JEANNE U075024 --S08VRNA HAYES, WILLIAM C.
U073763 --S08VRNA MCCREEDY, R L. / 2 U095202 --S14VM MCLEMORE, MARY K.
U303653 --TXDECD NUILA, CARLOS C E U134803 --S08VRNA - STEARNS JR, W J. /

FROM: RAMLOW, JONATHAN M.
Subject: Trip Report

Hi George:

- 1) The final contracted cost for the epi study update is \$346,225. In addition to the final report, interim reports are currently scheduled for 6/1/95, 12/1/95, and 6/1/96. The first draft of the final report is now due as of 11/1/96. Sorry about leaving these out, I just wanted to give a general idea of the total projected study period.
- 2) With regard to Dr. Tamburro, the Health Committee members expressed some concern at the meeting that he has not yet given us enough assurance that he can complete his brain cancer case-control study within the 7-9 month frame that he indicated in his letter of last October 27th. Since much of the value to the businesses would come from the availability of new data regarding brain cancer within calendar year 1995, we feel we would need to "pin him down" about this before making a strong recommendation to proceed with him.
- 3) Sorry about the "acronym-itis" in my trip report. ATSDR is the Agency for Toxic Substances and Disease Registry, an arm of the Centers for Disease Control and Prevention which is actually funded via the EPA and Superfund. ATSDR in 1992 identified priority VCM data needs in the areas of developmental and reproductive toxicity. ATSDR got no response from industry, to my knowledge, regarding voluntary research efforts to meet those data needs, so ATSDR passed them up to EPA. EPA then announced these data needs in a September 30 Federal Register notice of proposed test rules for VCM and other chemicals. In addition, EPA added its own proposed requirement for neurotoxicity testing for VCM; we do not know exactly why at this time.

In any case, CMA has indicated that the industry is interested in going forward with a voluntary research program at this time, but through our outside counsel we also indicated that we feel some discussion is in order with both ATSDR and EPA to better define the data needs and an optimal research program to meet them. ATSDR has clearly signaled a willingness to engage in this type of discussion, but only after we have submitted the repro. study protocol proposal to them. We have not yet heard back from the EPA about their willingness/unwillingness to negotiate. My understanding, based on what our counsel has said, is that EPA probably will be willing to do this, but it is not clear yet whether they will want to do so conjointly with ATSDR (which is what we proposed). The bottom line here is that we feel we have a clear understanding of how to proceed with ATSDR, but we are still waiting

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to hear from EPA about what they want to do.

I hope this clears things up somewhat. Please don't hesitate to let me know if there is anything else you'd like to know about what is going on.

Jonathan

*** Forwarding note from U077632 --S08VRNA 02/04/95 19:03 ***

To: U246074 --S21VM

cc: U303653 --TXDECD NUILA, CARLOS C E U077632 --S08VRNA DILLON JR, GEORGE
U073763 --S08VRNA MCCREEDY, RON R L U077399 --S08VRNA BOND, GREGORY G. /

*** Reply to note of 02/03/95 14:34

From: G.S. Dillon, Jr, Ind Solvents & Chlorides, 2020 Bldg, 6-4982

Subject: Trip Report

Jonathon, thanks for the summary of the 1/30/95 meeting of CMA VCM Panel Health Committee.

1) AEI study of "industry-wide cohort mortality." What was the final cost to hire AEI and will there be any interim reports or just a final report on 2/1/97?

2) Dr. Tamburro's proposed study of brain cancer among VCM-exposed workers: Please expand on your comments about what would be needed before obtaining financial support from the business...you mentioned "more detailed study protocol" and "adherence to a well-defined study schedule." What are you concerned about with Dr. Tamburro...?

3) ATSDR data needs for VCM. Last year in a broad review of your committee's 1994-95 proposed activities, you noted that the EPA testing requirements exceeded ATSDR data needs and recommended hiring an outside lawyer to negotiate a testing program with EPA that involves only those studies necessary to meet ATSDR data needs.

Your summary of the 1/30 meeting says that ATSDR won't meet with your committee until you provide a 2-generation inhalation repro study protocol. Perhaps my problem is that I don't know what ATSDR stands for, but it isn't clear to me what happened to negotiating with the EPA. Please explain what is happening.

Jonathon, thanks again for the report.

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From: U246074 --S21VM Date and time 02/06/95 16:42:18
To: U077399 --S08VRNA BOND, GREGORY G. / U077632 --S08VRNA DILLON JR, GEORGE
U076129 --S21VM DOMORADZKI, JEANNE U075024 --S08VRNA HAYES, WILLIAM C.
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FROM: RAMLOW, JONATHAN M.
SUBJECT: VCM Health Committee Conference Call

The Vinyl Chloride Panel Health Committee held a conference call this afternoon. The primary topic of conversation was the status of Dr. Carlo Tamburro's proposal for a brain cancer case-control study to be conducted and completed this year.

As I indicated in my recent trip report, the Health Committee members were basically impressed with Dr. Tamburro's experience and knowledge in the field of VCM health effects, and perceive significant scientific merit in his proposal to compare historical VCM exposure in a series of histologically confirmed brain cancer cases, and matched controls, from the original B.F. Goodrich/Louisville workforce. However, everyone agrees that Dr. Tamburro has not yet supplied us with an adequately described study plan or study timeline, and we are reluctant to recommend his proposal to the businesses until he can provide us with those supporting details.

Subsequent to today's conference call, we will proceed as follows: a Committee member who knows and has worked with Dr. Tamburro in the past will speak with him informally tomorrow about whether and how he would respond to a request from CMA for more details, in writing, about his proposed research. Assuming he will be amenable to this, I and the Committee will prepare a list of critical questions to which Dr. Tamburro can respond such that his answers will allow us to evaluate his proposal more thoroughly. For example, we will ask him for an outline of the steps he would need to take to complete the study, along with a time estimate for each step. We will ask him to provide documentation supporting his ability to obtain tissue specimens from brain cancer cases he identifies, and also documentation supporting the participation of the Armed Forces Institute of Pathology in obtaining definitive diagnoses of any identified brain tumors.

If Dr. Tamburro can provide us with such detailed information to support his proposal to conduct and complete this study within 1995, I believe the Committee will want to recommend that the companies support his brain cancer research, subject to contractual stipulations regarding dates for deliverables and financial incentives for keeping to the schedule.

Please let me know if you would like to discuss this further.

Jonathan Ramlow
517-636-1276

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U134803 --S08VRNA STEARNS JR, W J. / U285329 --S21VM	BARCIA, STEFFANIE	
U077494 --S21VM BODNER, KEN M. / 1 U287971 --S21VM	BURNS, CAROL C J	
U063460 --S21VM CARTMILL, JAN B. / NUS7014 --S21VM	CHAU, MONICA L. /	
U079317 --S21VM HEARN, SUE S U085139 --S21VM	JAMMER, BRENDA L.	
U090844 --S08VRNA MOHLER, RANDY R. / U084891 --S21VM	OLSEN, GEARY W. /	
U033173 --S21VM TORRES, KATHY A. / U098205 --S21VM	WAMSLEY, MICHELE R	
U074840 --S21VM PINGEL, RON J. / 1		

FROM: RAMLOW, JONATHAN M.
SUBJECT: Trip Report

1803 Building
February 3, 1995

TRIP REPORT - MEETING OF CMA VINYL CHLORIDE PANEL HEALTH
COMMITTEE

On Monday, January 30, I chaired the meeting of the CMA Vinyl Chloride Panel Health Committee in Washington, D.C. The primary purposes of the meetings were 1) to introduce Dr. Kenneth Mundt of Applied Epidemiology Inc. (AEI) to the Committee as a whole; 2) to hear a discussion by Dr. Carlo Tamburro, University of Louisville, of his request for funding to complete a case-control study of brain cancer among vinyl chloride-exposed workers; and 3) to discuss the current status of negotiations with ATSDR and EPA concerning developmental and reproductive toxicity testing. My trip expenses were paid for by Environmental Affairs, C&PP.

Dr. Mundt, I feel, impressed the Committee with his research background, knowledge of the history of VCM research, and professional demeanor. He clearly spelled out what kind of assistance he will need from the member companies in order to complete the industry-wide cohort mortality study update on schedule. Specifically, he asked each Committee member to identify for him the appropriate contact person within each company, with whom he can work to obtain current vital status information for cohort members considered alive at the end of the last update study. I will let him know that Jan Cartmill, administrator of the Epidemiology Surveillance System, will be the appropriate contact person for Dow.

Dr. Mundt and Dr. Shah of CMA reported to the Committee that a satisfactory contract had been worked out between CMA and AEI for the epidemiology study. The contract went into effect on February 1, 1995, and the current

anticipated date for delivery of a final report to CMA is February 1, 1997.

Dr. Carlo Tamburro described the history of his involvement in VCM related health research at some length. Through cooperative efforts by the University of Louisville and the B.F. Goodrich company, he was able to reach agreements with all 12 hospitals in the Louisville area whereby he can obtain clinical data and biological material for every VCM-exposed Goodrich employee hospitalized in the area. He proposes using these resources to obtain tissue samples from exposed employees thought to have died of brain cancer and to have these samples examined at the Armed Forces Institute of Pathology to obtain definitive diagnoses. He would compare the relative cumulative VCM (and 21 other chemicals) exposures of the actual primary brain cancer cases with that of matched controls, in a manner he used successfully in an earlier liver angiosarcoma study.

The Committee will be discussing the merits and limitations of his proposal at length next Monday in a conference call. My sense now is that the Committee does perceive substantial scientific merit in what Dr. Tamburro proposes to do. However, the Committee also perceives that in order to obtain financial support from the businesses, it will be necessary to demonstrate that a contract with Dr. Tamburro could contain stringent requirements for a more detailed study protocol and adherence to a well-defined study schedule.

CMA received a response from ATSDR to our inquiry late last year about the prospects for negotiating with them a Memorandum Of Understanding (by May 31 of this year) for the conduct of a study (ies) intended to address ATSDR's stated data needs for VCM. We had hoped that they would be willing to meet with us at an early date to discuss scientific issues in the areas of developmental and reproductive toxicity. It turns out that ATSDR's lawyers have advised them not to meet with us until after we have submitted a 2-generation inhalation repro. study protocol to ATSDR for review. After we submit a protocol, ATSDR will consider it appropriate to discuss the study plan with us.

Accordingly, I asked Jean Domaradzki to help me out by obtaining a "generic" 2-generation inhalation repro. protocol from H&ES Reproductive Toxicology. This she did, and I will send it to CMA and to the Health Committee's outside counsel. They, with advice from toxicologists on the Health Committee, will re-draft the protocol as a CMA document with specific references to vinyl chloride which we can then submit to ATSDR.

Finally, the Committee discussed a request for information from the California Environmental Protection Agency, which is currently preparing a new risk assessment of communities exposed to airborne VCM from the BKK landfill site in West Covina, CA. They are concerned that the currently available carcinogenic potency estimates for VCM, based on animal data, will yield unrealistically high risk estimates for the communities adjacent to the site, at which air levels of VCM between 10-20 parts per billion have been measured. In response, CMA will send CalEPA a copy of Dick Reitz's report of PBPK modeling-based risk assessment methods, which yield potency estimates for humans that are much lower than the current ones. We have also indicated that, should it seem useful, we would consider supporting Dick's going out there to discuss his work with CalEPA as he did for us with the US EPA last Fall.

Should you wish to discuss any of this material in more detail, please feel free to call me at the number below.

Jonathan M. Ramlow, Ph.D., M.P.H.

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From: U246074 --S21VM Date and time 12/07/94 14:58:55
To: U077399 --S08VRNA BOND, GREGORY G. / U077632 --S08VRNA DILLON JR, GEORGE
U076129 --S21VM DOMORADZKI, JEANNE U075024 --S08VRNA HAYES, WILLIAM C.
U073763 --S08VRNA MCCREEDY, R L. / 2 U303653 --TXDECD NUILA, CARLOS C E
U134803 --S08VRNA STEARNS JR, W J. /

FROM: RAMLOW, JONATHAN M.
SUBJECT: Site Visit To Applied Epidemiology Inc.

On Monday the 5th Dr. Has Shah of CMA and I met with Dr. Kenneth Mundt, of Applied Epidemiology Inc. and his working group in Amherst, Mass. We visited their office facility and discussed various aspects of the VCM cohort mortality study update. My overall conclusion is that AEI is a very competent, dedicated professional epidemiology organization from which we can expect a thorough-going, successful research effort, almost certainly within their current proposed budget and projected timeline.

We spent a lot of time discussing the major hurdle to be gotten over in getting the study off the ground, which will be the matter of data inventory and transfer from California to Amherst. Dr. Mundt has already begun to make arrangements to obtain more space than they have already. After my conversation with his data manager/programmer and a demonstration of their data management systems, I am confident that they will be able to handle the data expeditiously once they actually get there. We also discussed a number of action items that Has Shah and I can undertake prior to the actual study start date to make sure that there will be few difficulties in transferring the data and records. For example, we will most likely carry the computer tapes from the previous update directly from California to Amherst, instead of waiting for the tapes to be shipped with all of the hard-copy records. I also offered to have an off-line discussion with National Death Index personnel to see if there is anything that we can do to speed up AEI's getting access to all the death certificates from the previous update.

During the course of our discussions, we touched on the question of AEI's current contractual obligations, in terms of their not being spread too thinly to complete the CMA study within the projected timeline of 24 months. It turns out that they will be completing one fairly sizable project in January, so they should be able to start in on our study without any delays due to previous commitments. We also discovered that one of their current contracts is with a company in which Has Shah has some contacts. He talked to the people he knows in that company, who gave AEI a favorable review, which was good news.

Our next step is to begin to lay out the terms of a contract with AEI, leading up to execution of a contract agreement by the end of January. During the meeting the only addition to their proposal we felt necessary was the specification that they provide more frequent, brief progress reports. Dr. Mundt will modify their proposed timeline to reflect this addition.

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Please let me know if you have any questions regarding this matter.

Jonathan Ramlow
636-1276

cc: U079317 --S21VM HEARN, SUE S U084891 --S21VM OLSEN, GEARY G W

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From: U246074 --S21VM Date and time 11/30/94 13:17:57
To: U077399 --S08VRNA BOND, GREGORY G. / U077632 --S08VRNA DILLON JR, GEORGE
U076129 --S21VM DOMORADZKI, JEANNE U075024 --S08VRNA HAYES, WILLIAM C.
U073763 --S08VRNA MCCREEDY, R L. / 2 U303653 --TXDECD NUILA, CARLOS C E
U134803 --S08VRNA STEARNS JR, W J. /

FROM: RAMLOW, JONATHAN M.
SUBJECT: CMA Industry-wide VCM Epi Study

The CMA Vinyl Chloride Research Coordinators group has received a revised proposal for the epidemiology study update from Dr. Ken Mundt of Applied Epidemiology, Inc. of Amherst, Massachusetts. His revised proposal covers an estimated study period of 24 months, to begin in February of 1995, at a total estimated cost of \$335,000 (down from \$400,000). Dr. Shah of CMA have made arrangements to meet with Dr. Mundt and his staff in Amherst the first part of next week to get acquainted, discuss the logistics of data transfer, management, and storage, and visit their facility. Unless something appears seriously amiss during this site visit, I expect that w will proceed with final contract negotiations. I will report to you when I get back next week.

Jonathan Ramlow

cc: U079317 --S21VM HEARN, SUE S U084891 --S21VM OLSEN, GEARY G W