

From Steve Phillips

To: Denny Mountz

14JAN98

Subject: Meeting with Wendy Sherman on 14JAN98

page 1 of 2

Sherman 14JAN98.doc

I met with Wendy Sherman of CMA on 14JAN98 to get an overview of the activities that she monitored that OxyChem participated in. These notes are reflective of that meeting. S.

Wendy Sherman - Vinyl Chloride

2 Committees

Health Committee (was JBK)

Transportation (George Marshall)

OxyChem's costs of 1998 = \$25,785 (not paid yet)

Budget

Molecular Research - Swenberg	\$75,000
Risk Assessment (EPA/IRIS)	\$20,000
Outside Legal	\$15,000
Contingency/General	\$40,000
TOTAL	\$150,000

Administrative Costs	\$120,000*
	*paid from carried over money

Shares

Dow Chemical	25%
Occidental Chemical	17%
Formosa	15%
GEON	13%
Condea Vista	10%
Borden	7%
Georgia Gulf	7%
PPG	6%
TOTAL	100%

From Stev Phillips

To: Denny Mountz

14JAN98

Subject: Meeting with Wendy Sherman on 14JAN98

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ATTACHMENTS

- 1) Commitment form \$25785
- 2) Vinyl Chloride health Committee 1998 Research Budget Program dated 4DEC97
- 3) Molecular Dosimetry of vinyl Chloride James A. Swenberg, DVM, Ph.D. Research report and Budget Request 28JUL97
- 4) Vinyl Chloride Health Committee members
- 5) Vinyl Chloride Transportation Committee
- 6) Letter of 12JAN97 to VCHC Members re: meeting 19FEB98 in North Carolina
- 7) Vinyl Chloride Health Committee (VCHC) Activities
- 8) Vinyl Chloride Panel History and Accomplishments
- 9) Vinyl Chloride Health Committee 1997-1998 Program Budget

← Wendy Sherman
14 JAN 98

(1)

CHEMICAL MANUFACTURERS ASSOCIATION
Vinyl Chloride Health Committee
Commitment Form

☐ My company, Occidental Chemical Company, commits \$ 25,785 to the Vinyl Chloride Health Committee 1998 Research Budget Program as outlined in the attached December 4, 1997 correspondence. Please invoice my company for the 1998 budget as indicated below. The Vinyl Chloride Health Committee is conducted under the policies and procedures outlined in the CHEMSTAR Panel Guidelines and briefly noted on the reverse of this form.

Please send me an invoice for \$ 25,785 ☐ in December 1997 ☐ in January 1998.

CMA has estimated that 13% of the June 1, 1997 - May 31, 1998 fiscal year "dues and similar income" is allocable to lobbying and political expenditures to which Section 162 (e)(1) of the Internal Revenue Code of 1986, as amended, applies. Consequently, this portion of your commitment is not deductible as an ordinary and necessary business expense for federal income tax purposes. Further, contributions to CMA are not tax deductible as charitable contributions.

Panel Representative

Management Contact (Optional)

Name (Signed)

Name (Signed)

Name (Typed)

Name (Typed)

Title

Title

Company

Company

Address

Address

Telephone

Telephone

Fax

Fax

Please return signed form to Wendy K. Sherman, Manager, Vinyl Chloride Health Committee, 1300 Wilson Boulevard, Arlington, VA 22209.

004598.003

Vinyl Chloride Health Committee 1998 Research Budget Program

(2)

December 4, 1997

<u>Activity</u>	<u>Approved Budget*</u>
Molecular Research-J. Swenberg	75,000
Risk Assessment (EPA/IRIS)	20,000
Outside Legal	15,000
Contingency/General	40,000
	150,000

<u>Company</u>	<u>Capacity (millions of lbs)</u>	<u>% of Total Capacity</u>	<u>Total Commitment Required</u>
Borden Chemical	1,030	7.08	10,620
Dow Chemical	3,600	24.76	37,140
Formosa Plastics	2,160	14.85	22,275
GEON	1,900	13.07	19,605
Georgia Gulf	1,026	7.06	10,590
Occidental Chem	2,500	17.19	25,785
PPG Industries	840	5.78	8,670
CONDEA Vista Chemical	1,485	10.21	15,315
TOTAL	14,541	100.00	150,000

004598.004

*The Carryover Surplus and interest generated will cover the estimated administrative costs of \$120,000 for 1998.

Molecular Dosimetry of Vinyl Chloride

James A. Swenberg, D.V.M., Ph.D.

Research Report and Budget Request

July 28, 1997

Research Report

Year 1 (1996-1997 Budget)

The laboratory portion of this project began this spring by sending teams of 3-4 of our laboratory personnel to New Jersey to collect tissues and liver cell types from rats that were exposed to 0, 10, 100, or 1100 ppm vinyl chloride (VC) for 1-20 days. Procedures were rather difficult during the first set of necropsies, but went much better for subsequent procedures after we sent an additional person and shipped up our own centrifuge. We were able to harvest good yields of cells and tissues for the experiment as a whole. It was unfortunate that the [^{14}C]-VC experiment was the first to come off, as this was the least smooth running of all. Even so, adequate numbers of cells were able to be harvested to meet our objectives.

We are currently isolating DNA from the 4-week hepatocytes, as these are the most plentiful cells. A new immunoaffinity chromatograph-GC/MS method is replacing our previous low pressure strong cation exchange-GC/MS method for the analysis of ethenoguanine. After this shakedown, we will begin working with the [^{14}C]-VC liver cells. Parallel to this effort will be the analysis of urines for excretion of ethenoadenine using immunoaffinity chromatography and LC-MS. Likewise, we will begin examining the major DNA repair pathway for VC DNA adducts including methyl purine glycosylase (MPG) and AP-endonuclease (AP).

Year 2 (1997-1998 Budget)

During Year 2 we will continue to work up the many samples collected in New Jersey. Priority will be given to establishing exposure response relationships, identifying cell-specific differences in DNA repair, determining effects of exposure on endogenously formed DNA adducts, and doing initial studies related to incorporating these data into a PB/PK risk assessment model. We are also developing new methods for the $^1\text{N},2$ -ethenoguanine adduct, which has never been characterized *in vivo*.

Year 3 (1998-1999)

We expect to complete this research during the third year. At this time, we will have analyzed all of the relevant tissues and cells for DNA adducts, will establish the role of defects in DNA repair and the effect of induction of DNA repair on exogenous and endogenous DNA adducts, and incorporate these data into a biologically-based risk assessment model.

Research Budget

My understanding of the funding available for this project is that between \$50,000-75,000 will be available per year for three years. The cost of this research project will greatly exceed this, with personnel costing ~\$140,000 this year. However, since VC has been and continues to be one of the chemicals that we are investigating under our NIEHS Superfund Basic Research Program Project, I can offset part of the cost, providing that the CMA agrees to share acknowledgement with NIEHS. Should we need additional [$^{13}\text{C}_1$]-VC exposures, they can be done at UNC, since the EOIC has agreed to fund new research that includes funds to set up a small nose-only exposure system for similar studies on ethylene oxide. Thus, we can maximize our future research dollars to fund critical studies. We need to move forward as fast as possible, as the EPA has already developed a new risk assessment on VC that suggests increased risk compared to their previous estimates. The new assessment incorporates metabolism data, but not information on DNA adducts or DNA repair. Finally, we incurred major expenses during the four trips to New Jersey that were not included in Year 1's budget. These are listed under sample collection in the budget.

1997-1998 Budget request

Sample collection		\$20,695
Travel expenses	\$8172	
Shipping	752	
Supplies	11771	
Research budget		\$66,500
Personnel	35000	
Supplies	24000	
LC-MS/MS time (\$25/hr)	2500	
Travel	3000	
Equipment maintenance agreements	2000	
TOTAL BUDGET REQUEST		\$87,195

Chemical Manufacturers Association
Vinyl Chloride Health Committee
P16C

(4)

Dr. James A. Barter
Director of Environmental Health Science
PPG Industries, Inc.
One PPG Place
Pittsburgh, PA 15272
(412)434-2801
Fax (412)434-2137

Mr. John Gamble
Westlake Chemical Corp.
2801 Post Oak Blvd.
Suite 600
Houston, TX 77056
(713)960-9111
Fax (713)629-6240

Dr. Robert K. Hinderer
Dir., Hlth, Tox. & Prod. Sfty
The BFGoodrich Company
9911 Brecksville Road
Cleveland, OH 44141-3247
(216)447-5181
Fax (216)447-5710

Colin Park, Ph.D
Mgr, Issues Mgmt/Biostatistics
The Dow Chemical Company
1803 Dow Center
Midland, MI 48674
(517)636-1159
Fax (517)638-2425

Dr. Steven J. Phillips
Occidental Chemical Corp.
5005 LBJ Freeway
Rm. 904
Dallas, TX 75244-9050
(972)404-2413
Fax (972)404-3287
E-Mail STEVEN_PHILLIPS@OXY.
COM

Mr. Jay Strange
Industrial Hygienist
Georgia Gulf Corporation
26100 Highway 405
Plaquemine, LA 70765
(504)389-2642
Fax (504)687-0294

Mr. Ed Beeler
Dir., Env. Health & Safety
The Geon Company
One Geon Center
Avon Lake, OH 44012
(440)930-3030
Fax (440)458-5921

Mr. Mark A. Gruenwald
Assoc. Dir., Product Safety
Borden Inc.
180 E. Broad Street
15th Floor
Columbus, OH 43215
(614)225-3459
Fax (614)225-7638

Mr. Caffey Norman
Patton Boggs, L.L.P.
2550 M St., N.W.
Washington, DC 20037
(202)457-5270
Fax (202)457-6315

Dr. David A. Penney
Sr. Toxicologist, Product Sfty
CONDEA Vista Company
900 Threadneedle
P.O. Box 19029
Houston, TX 77079-2990
(281)588-3059
Fax (281)588-3478

Mr. David Pun
Senior, Corporate Industrial Hygiene
Formosa Plastics
9 Peachtree Hill Rd.
Livingston, NJ 07039
(973)716-7279
Fax (973)716-7283

004598.008

Chemical Manufacturers Association
Vinyl Chloride Transportation Cmte
P29A

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Mr. Thomas G. Grumbles
Manager, Product Safety & Occup. Health
CONDEA Vista Company
900 Threadneedle
P.O. Box 19029
Houston, TX 77224-9029
(281)588-3445
Fax (281)588-3478
E-Mail TGRUMBLES@CVCNET.COM

Mr. Tom Hester
PPG Industries, Inc.
P.O. Box 1000
1300 Columbia Southern Rd.
Lake Charles, LA 70601
(318)491-4260
Fax (318)491-4693

Mr. George Marshall
Occidental Chemical Corp.
5005 LBJ Freeway
Dallas, TX 75244
(512)776-6120
Fax (512)776-6085 214-400-3300

Mr. Bill Trotter
The Dow Chemical Company
P.O. Box 150
Building 6601
Plaquemine, LA 70764
(504)353-8809
Fax (504)353-5322

Mr. Richard H. Wagner
Coordinator Transp. Sfty.
Borden Packaging & Industrial
180 E. Broad Street, 24th Flr
Columbus, OH 43215
(614)225-4628
Fax (614)225-4998

Mr. Bob L. Wronko
Mgr, Transp. Regulatory Svcs
The Geon Company
LaPorte Plant
2400 Miller Cut Off Road
LaPorte, TX 77571
(281)476-8052
Fax (281)476-8081

Mr. Forrest Henson
JTS Enterprises, Inc.
Suite 153
4600 Post Oak Place
Houston, TX 77027
(713)621-6740
Fax (713)621-2454

Mr. Tim LeBlanc
Formosa Plastics
P.O. Box 271
Baton Rouge, LA 70821
(504)356-8620
Fax (504)356-8608

Ms. Carol Toth
Keller and Heckman
1001 G Street, NW
Suite 500 West
Washington, DC 20001
(202)434-4209
Fax (202)434-4646

Mr. Frank Vendt
Georgia Gulf Corporation
P.O. Box 629 Hwy. 405
Plaquemine, LA 70765-0629
(504)685-2601
Fax (504)687-2442

Mr. David V. Wise
Project Engineer
Shintech, Inc.
#24 Greenway Plaza
Suite 811
Houston, TX 77046
(713)965-0713
Fax (713)627-0988

004598.009



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CHEMICAL MANUFACTURERS ASSOCIATION

January 12, 1997

Dear Vinyl Chloride Health Committee Members:

On last week's conference call the Committee discussed the draft Huntingdon developmental report. The comments I received in writing and over the phone have been forwarded to Huntingdon. Copies of the comments were also sent to those members who requested them. If you haven't returned the authorization form accepting the report, please take a moment now to do so (fax number 703/741-6091). If you need another copy of the authorization form, call my staff assistant, Cynthia Barrett (703/741-5642).

On the call we also discussed submitting comments on the recent proposal by the California Office of Environmental Health Hazard Assessment (OEHHA) to establish a chronic Reference Exposure Level (REL) for vinyl chloride. The chronic RELs are based on non-cancer health effects and are intended to represent ambient concentrations of compounds to which a susceptible person in the general population could be exposed for a lifetime with out adverse effects. The REL will be used in California's Air Toxics "Hot Spots" program, which requires certain facilities to conduct site-specific risk assessments. Please fill out the attached authorization form and return it to me by Wednesday, January 14th. The comment deadline for the RELs closes January 30th.

In addition, a recent Federal Register Notice was brought to my attention (see attached). EPA is planning to submit Information Collection Requests (ICRs) to the Office of Management and Budget. The ICRs could potentially affect "... exhaust gases and oxychlorination vents at ethylene dichloride plants; exhaust gases at vinyl chloride monomer plants; and exhaust gases, reactor opening losses, manual vent valves and stripping residuals at polyvinyl chloride plants. The standards also apply to relief valves and fugitive emission sources at all three types of plants." Further on in the notice, the EPA asks for input on four specific points (i.e., is the information collection necessary, is the agency's evaluation of the burden of reporting this information accurate, how could the quality, utility, and clarity of the information to be collected be enhanced, and a request for suggestions to minimize the reporting burden). Please review the notice and let me know if the VCHC should submit comments by faxing back the attached authorization form by Wednesday, January 14th. The comment deadline on this notice closes February 2nd.

Finally, we have located a meeting room for our February 10th Committee meeting in North Carolina. The meeting will be held at the offices of Patton Boggs. The meeting will be from 8:30 a.m. to 2:30 p.m. and we will have a working lunch. Hotel accommodations can be made at the Imperial Sheraton at 919/941-5050. The hotel is within walking distance of Patton Boggs. When making reservations, please mention Patton Boggs to receive the corporate rate of \$120/regular room or \$140/upgraded room. A draft agenda for the meeting will be sent out by the end of the week. Please return the attached meeting attendance form by next Wednesday, January 21, 1998

004598.010



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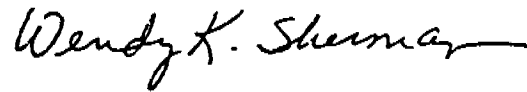
1300 WILSON BLVD., ARLINGTON, VA 22209 • TELEPHONE 703-741-5000 • FAX 703-741-6000



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As always, if you have any questions, I can be reached at 703/741-5639.

Sincerely,

A handwritten signature in cursive script that reads "Wendy K. Sherman". The signature is written in dark ink and has a fluid, connected style.

Wendy K. Sherman
Manager, Vinyl Chloride
Health Committee

Attachments(3)

CHEMICAL MANUFACTURERS ASSOCIATION
VINYL CHLORIDE HEALTH COMMITTEE (VCHC) ACTIVITIES

Memorandum of Understanding (MOU) with the Agency for Toxic Substances and Disease Registry (ATSDR) - The Vinyl Chloride Health Committee (VCHC) signed the MOU with ATSDR in lieu of a TSCA Section 4 testing requirement. The study, which is currently being conducted, will fill a number of data gaps regarding the reproductive and developmental toxicity of vinyl chloride.
Cost: \$700,000 U.S. dollars

Huntersdon
study

inhalation
repro-
J.B.K. +
Dore Pinner
in the 70s
Analysis

* Update of Mortality Among Vinyl Chloride Workers - This epidemiology study is updating mortality information among vinyl chloride workers for the years 1983 through 1992. The original study and first update focused on the time periods 1942-1972 and 1973-1982, respectively. Earlier studies have shown vinyl chloride to be associated with hepatic angiosarcoma among exposed chemical workers. K. Mundt is the principle investigator.
Cost: \$500,000 U.S. dollars

Ken Mundt new baseline - to include additional work
Applied Epidemiology Inc.
Amherst, MA

* Brain Cancer Study - Since the discover of an association between vinyl chloride workers and hepatic angiosarcoma, there has been speculation on the relationship of vinyl chloride with other cancers. The VCHC and K. Mundt are working with investigators at the University of Louisville to examine the possible relationship between vinyl chloride and brain cancer among exposed chemical workers. Carlo Tamburro, MD - principle investigator
Cost: \$150,000 + U.S. dollars

Molecular Carcinogenesis Satellite Studies- The VCHC is supporting a series of studies at the University of North Carolina on the formation and repair of DNA adducts to elucidate the mechanisms of vinyl chloride carcinogenesis. Swenberg
Cost: \$120,000 + U.S. dollars

International Life Sciences Institute Project on Non-Tumor Data - The VCHC joined with a number of other sponsors to underwrite a project by the International Life Sciences Institute (ILSI) to use non-tumor data to quantitatively estimate cancer risk.
Cost: \$10,000 U.S. dollars

Swenberg + Harvey Cline
study

Physiologically-Based Pharmacokinetic (PBPK) Modeling - The VCHC hired a consultant to meet with the Environmental Protection Agency to discuss the use of PBPK modeling for vinyl chloride.
Cost: \$6,000 U.S. dollars

VINYL CHLORIDE PANEL History + Accomplishments

← Wendy Sharma
14 JAN 98

HISTORY: The Panel was formed in 1971 by vinyl chloride manufacturers to develop and assess health and safety data on vinyl chloride. The Panel expanded its scope of activities in 1991 to address safety issues in the transportation of vinyl chloride monomer. In 1992, the Panel formed the Vinyl Chloride Transportation Network (VCNet) to provide technical expertise and assistance by the industry and contractors to emergency responders at vinyl chloride railroad transportation incidents. Shippers of vinyl chloride are able to activate the network through CHEMTREC, CMA's hazardous materials hotline. VCNet is the first mutual aid network to be formed under CHEMSTAR.

VINYL CHLORIDE HEALTH COMMITTEE

ACCOMPLISHMENTS: In lieu of a TSCA Section 4 testing requirement, the Committee signed a memorandum of understanding (MOU) with the Agency for Toxic Substances and Disease Registry to conduct a study of the reproductive and developmental effects of vinyl chloride. Under the MOU, the Panel is sponsoring a combined inhalation two-generation reproduction and developmental toxicity study in CD rats. The study, which is currently in progress, will be finalized by mid-1998. The Committee is also sponsoring research at the University of North Carolina on the formation and repair of DNA adducts induced by vinyl chloride.

The Committee also is continuing to work on an update of the study of mortality among vinyl chloride workers. The mortality study, first published in 1974, is being updated through the year 1994. The update provides an important opportunity to expand the knowledge base of possible health effects of occupational exposure to vinyl chloride. The Committee anticipates completing the study in the first half of 1998. The Committee is also working with researchers from the University of Louisville to examine the possible relationship between exposure to vinyl chloride and brain cancer among chemical industry workers.

In an April 1996 Federal Register Notice EPA announced a request for technical information on eleven chemicals, including vinyl chloride. The notice was part of a pilot program to enhance the quality of chemical-specific information in the Agency's Integrated Risk Information System (ILSI) through peer review and increased public involvement. The Committee submitted a number of papers on the pharmacokinetic modeling of vinyl chloride exposure. An external peer review committee met in May to discuss the revised file. Following incorporation of their comments, a consensus document will be viewed by an Agency committee and then the updated file will be placed in the IRIS database. The file update expected to occur in late 1997. The Committee will continue to monitor activity on this pilot project.

The Committee joined with a number of other sponsors to underwrite a project by the International Life Sciences Institute to use non-tumor data to quantitatively estimate cancer risk. Vinyl chloride is one of three chemicals being evaluated in this project. Once the draft vinyl chloride case study is prepared, Committee members will meet with reviewers to discuss the study and develop recommendations on the use of non-

tumor data in cancer risk assessment, including identification of future research needs. The meeting between Committee members and reviewers is expected to occur in early 1998.

In October, Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA) published a notice announcing a public comment period for 45 candidate chemical, including vinyl chloride, for which draft data summaries and prioritizations have been assigned for carcinogenicity or reproductive toxicity concerns. In November the Committee submitted comments noting that based on the available toxicological literature, vinyl chloride was unlikely to be a developmental or reproductive toxicant. The Committee notified Cal/EPA of the combined two-generation developmental and reproductive study being conducted under the MOU with ATSDR and proposed to share the results of that study with the Agency.

PLANS: Over the next year the Committee anticipates finalizing the combined two-generational developmental and reproduction study, and the mortality update of vinyl chloride workers. The Committee will continue to support activities on the brain cancer study in chemical industry workers, the ILSI case study on using non-tumor data in risk assessments, and the DNA adduct being conducted at the University of North Carolina. The Committee will also continue to work with regulatory agencies and other concerned organizations on matters relating to health and safety aspects of vinyl chloride.

VINYL CHLORIDE TRANSPORTATION COMMITTEE

ACCOMPLISHMENTS: In November, members of the Vinyl Chloride Transportation Committee made a series of presentations at the CHLOREP '96 Workshop. The workshop, sponsored by the Chlorine Institute, was held in Phoenix, AZ. Presentations included a training program for emergency responders, and an overview of Committee activities.

As a service to emergency responders, the Committee is producing a video on mitigating non-accidental leaks in vinyl chloride tank cars. The video, *Vinyl Chloride Monomer Tank Car Leak Mitigation and Capping Kit Installation*, is slated for completion by the end of 1997.

In the past year the Committee has worked with the Association of American Railroads to develop designs for tank car manway covers. By coordinating activities with the AAR, the Committee is supporting the development of manway covers that are compatible with existing emergency capping kits.

The Committee joined with other trade associations and CMA Task Groups in commenting on an advanced rulemaking addressing the applicability of the hazardous material regulations to chemical loading, unloading, and storage activities. The upcoming notice of proposed rulemaking on this issue is anticipated in the fall of 1997. Over the last year the Committee has also submitted comments to the U.S. Coast Guard on the qualifications for barge tankermen, a filed a petition with the Department of Transportation regarding the labeling of vinyl chloride rail cars, and joined CMA's

Marine Transportation and Pipeline Task Groups in submitting comments on a proposed marine transportation related pipeline testing rulemaking.

PLANS: Over the next year the Committee will update a variety of VCNet materials including the VCNet agreement, the Operations Manual, Safety Awareness Training Manual, a map of emergency responders and an educational brochure. The Committee will also continue its collaboration with the Association of American Railroads. The Committee will join with other transportation-related Task Groups at CMA to provide comments on the upcoming OPA '90 Hazardous Substances Response Plan Regulations and on the Hazardous Material Regulations to Chemical Loading, Unloading and Storage activities. Both proposed rulemakings are expected to be published this winter.

(9)

← Wendy Sherman

14 JAN 88

July 29, 1997

CHEMICAL MANUFACTURERS ASSOCIATION
Vinyl Chloride Health Committee
1997-1998 Program Budget*

Activity	Proposed Budget**
Molecular Research (James Swenberg, UNC)	75,000
Risk Assessment (EPA/IRIS)	20,000
Outside Legal	15,000
Contingency	<u>40,000</u>
	\$150,000

Company	Capacity (millions of lbs.)	% of Total Capacity	Pro-rata share of the 1998 Proposed Budget
Borden Chemical	935	7.18	\$ 10,770
Dow Chemical	2,960	22.73	34,095
Formosa Plastics	2,160	16.58	24,870
GEON	1,400	10.75	16,125
Georgia Gulf	1,260	9.67	14,515
Occidental Chem	2,500	19.19	28,785
PPG Industries	840	6.45	9,675
CONDEA Vista	970	7.45	11,175
	13,025	100.0	\$150,000

* To cover expenses for the remainder of 1997 and all of 1998

** The surplus of \$107,260.98 plus the interest generated would cover the estimated administrative costs of \$120,000 for August to December 1997 and the calendar year 1997₄ (17 months)

004598.016

CHEMICAL MANUFACTURERS ASSOCIATION

Vinyl Chloride Panel

Health Committee

Financial Statement - Phase 10

June 1993 Through July 1997

EXPENSESActivity

Spent/

Committed**Epidemiology Study Update**

Applied Epidemiology, Inc.

449,895.00

ENSR

9,260.92

Contingency

15,844.08

Total

475,000.00

Brain Cancer Case-Control Study

University of Louisville

120,000.00

Protocol Peer Review Cons.-Checkoway

1,125.00

Protocol Peer Review Cons.-Marsh

1,912.50

Contingency

*3,862.50

Total

126,900.00

Reproductive, Developmental, and Mechanistic Research Studies

Huntingdon Lab-Repro/Develop

584,582.00

Huntingdon Lab - Satellite

48,092.00

University of North Carolina-Gift

50,000.00

University of North Carolina-Travel Related

20,695.00

¹³C₂ Vinyl Chloride Synthesis

11,200.00

GEON shipment of Vinyl Chloride

2,737.16

Study Monitoring-D. Penney

1,600.62

Study Monitoring - J. Knaak

922.22

Contingency

30,171.00

Total

750,000.00

Risk Assessment

Reitz

597.47

Reitz

4,497.96

Swenberg

548.40

Int'l Life Sciences Institute

10,000.00

Total

15,643.83

Outside Counsel

June 1994-May 1995

6,540.10

June 1995-May 1996

25,164.08

June 1996-May 1997

10,994.13

Total

42,698.31

AdministrationDirect TimeMisc.**Total

June 1993-May 1994

7,677.50

516.85

8,194.35

June 1994-May 1995

45,265.00

4,897.44

50,162.44

June 1995-May 1996

46,842.50

3,856.08

50,698.58

June 1996-May 1997

74,722.50

3,518.16

78,240.66

June 1997-July 1997

13,545.00

0.00

13,545.00

Total

188,052.50

12,788.53

200,841.03

200,841.03**Total****\$1,611,083.17**

004598.017

** Includes expenses for Panel lunches, dinners, express mailings, and conference calls.

09/23/97

CHEMICAL MANUFACTURERS ASSOCIATION
Vinyl Chloride Panel
Health Committee
Financial Statement - Phase 10
June 1993 Through July 1997

REVENUE

<u>Period</u>	<u>Company Contributions</u>	<u>Interest</u>	<u>Total</u>
June 1993-May 1994	24,000.00	118.14	\$24,118.14
June 1994-May 1995	453,353.50	7,225.76	460,579.26
June 1995-May 1996	628,915.00	23,020.04	651,935.04
June 1996-May 1997	447,865.00 *	38,472.71	486,337.71
June 1997-July 1997	0.00	0.00	0.00
Anticipated Revenue	81,374.00	0.00	81,374.00
ENSR	14,000.00	0.00	14,000.00
Total	1,649,507.50	68,836.65	\$1,718,344.15

EXPENSES

See Attached for details

\$1,611,083.17

BALANCE

\$107,260.98

004598.018

* The Dow Chemical Company was given a credit of \$34,452 against its commitment for providing epidemiology consulting services.