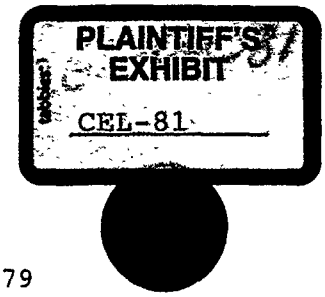

TO: BA MELAAS

6-15-79
CDB-177-79

FROM: CD BARRETT

SUBJECT: MID-YEAR STATUS OF 1979 OBJECTIVES
DEPARTMENT OF INDUSTRIAL HYGIENE AND TOXICOLOGY

I. Medical Surveillance

A. Coordinate the implementation of the computer-assisted Health Monitoring System.

Rating

1. Meet formal Project Team implementation schedule.
2. Implementation within 3 months of formal schedule.
3. Delayed implementation (over 3 months).

Status

Phased implementation of the Health Monitoring Project during 1979 is presently on schedule in terms of both time and cost. Employee participation in Phase I of the Medical Examination Program exceeded 98% company-wide. The most significant problem that we have encountered thus far has been our inability to provide employees who are examined during the first pass of the program with a complete computer report of their exam results. This problem should be corrected by the second pass of the exam program beginning in late August. Corporate Systems Services had projected spending $110M of Chemical Company funds on the computer program development during 1979. Presently, approximately $50M has been spent as of June 15, 1979. We have spent approximately $10M of the projected $25M allocation for consultants during 1979. I am optimistic that we can meet our overall 1979-80 project schedule.

However, significant problems must be overcome in the following areas.

1. Development of an effective time card system for zone tracking of employees.

2. Development of historical work history information on all employees.

3. Development of an effective system for coding medical data.

A significant delay in hiring the Company Medical Director (which had been anticipated by July, 1979) could result in higher consulting fees next year with Dr. Irv Tabershaw.

B. Assist the Plants and Technical Center in establishing the "exposure zones".

Rating

1. Complete by March 31, 1979.
2. Complete by
3. Complete by

Status

Exposure zones were established at all the Plants by March 31. Moderate progress has been made in developing a modified exposure zone concept for the Tech Center. Hopefully, the Tech Center modified zone concept (using sanction numbers) will be fully developed by late July, 1979.

C. Coordinate the design of the required industrial hygiene forms (i.e., qualitative exposure data and quantitative exposure data).

Status

The quantitative industrial hygiene form was completed during May, 1979. Several drafts of the qualitative forms have been developed. Hopefully, the qualitative forms will be finalized by late July, 1979.

D. Define the industrial hygiene report requirements.

Rating

1. Complete by February 28, 1979.
2. Complete by
3. Complete by

Status

Industrial Hygiene report requirements were completed during March, 1979. They have been reviewed by Dr. Irv Tabershaw's consulting group and by Dr. Lee Starr's organization.

E. Coordinate the development of the computerized "chemical inventory" system.

Status

Development of the computerized chemical inventory system was completed by the end of May, 1979. This was approximately 6 weeks to 2 months behind schedule because of lengthy delays in the initial loading of the computer systems with existing safety and health information on Plant chemicals. Mr. Grover Vos will be working closely with

the Plants during the next three months to assure the complete implementation and utilization of the new inventory system. This Chemical Company system is being expanded by the Corporation into a Corporate-wide chemical inventory system entitled "Celmis".

F. Ensure that the computer-assisted health monitoring system meets the recordkeeping (and reporting) requirements of a noise conservation program.

Status

Marginal progress has been made on this objective. Grover Vos will be evaluating the record-keeping requirements associated with the noise conservation program during the coming months.

II. Training Programs

A. Conduct an Industrial Hygiene/Toxicology training program for Marketing S/A employees.

Status

An informal Industrial Hygiene & Toxicology seminar relating to the MFA's was held in May, 1979, with Marketing, Technical Center and Pampa Plant representatives. I have made preliminary contacts with Mr. Ed Vant and Mr. Bob Brown in scheduling a formal IH&T training seminar at the fall Marketing meeting.

B. Complete training programs on medical surveillance, methanol and carbon monoxide.

Rating
1. Complete by February 15, 1979.
2. Complete by March 15, 1979.

Status

The medical surveillance and carbon monoxide video-tape training programs were completed on schedule. The methanol program was completed during April, 1979.

C. Coordinate the development of a training program on the work history and industrial hygiene requirements of the health monitoring system.

Rating
1. Complete by July 15, 1979.

Status

The second medical surveillance training program has been re-scheduled for completion during the last quarter of

1979. The program cannot be developed until the Industrial Relations Organization finalizes the plans for the time card zone tracking system.

III. Toxicology

A. Maintain (and promote) management understanding and support of the toxicity testing program.

Rating
Grade on effectiveness.

Status

Moderate progress has been made in this area. I feel that Company management has a much better understanding and more actively supports our toxicity testing program than does Plant management. I hope to increase my efforts during the last half of the year in promoting better understanding at the Plants of the toxicity testing program.

B. Prioritize all Company products for toxicity testing indicating what toxicity data already exists and what needs to be developed. Estimate testing and cost requirements for the next 3 years.

Rating
1. Complete by March 15, 1979.
2. Complete by April 15, 1979.

Status

This objective was completed on schedule.

C. Coordinate Celanese participation in inter-industry toxicity studies.

Status

Due to time requirements associated with the Health Monitoring System, I have been unable to play an active role in coordinating Celanese participation in inter-industry toxicity studies. We need to increase our efforts during the last half of 1979 in initiating industry-wide studies involving aliphatic alcohols and aldehydes, and possibly several other products.

D. Obtain the toxicity data required for FIFRA registration of paraformaldehyde.

Status

Our department formally assumed full responsibility for the FIFRA registration of paraformaldehyde during May, 1979. The contract and protocol have already been developed with Bio/dynamics to conduct the necessary toxicity testing for the registration. Furthermore, a meeting has been scheduled for June 20 with Dr. Bill Olsen and Company representatives to develop a detailed action plan for pursuing the registration.

E. Serve as Chairman for the Toxicity Review Committee.

Status

The Toxicity Review Committee is still functioning on an informal basis. Hopefully, during the last half of 1979, the committee responsibilities and functions can be formalized and semi-regular meetings can be held to resolve many key toxicity questions. I am still only marginally happy with our performance in developing interpretive statements of toxicity test results for the Plants.

IV. Analytical Support/Monitoring Surveys

A. Obtain or develop a validated air monitoring method for acrylic acid.

Rating
1. Complete by February 1, 1979.
2. Complete by

Status

We were unable to meet our schedule. Pampa is presently working on the development of an acrylic acid monitoring method, and we are not presently in a position to establish a firm completion date. We have determined that the Union Carbide acrylic acid method is unacceptable. This has been our most challenging method validation project.

B. Determing the feasibility of a solid sorbent formaldehyde method.

Rating
1. Complete by March 31, 1979.
2. Complete by

Status

We have lowered our priority in developing a solid [illegible] for [illegible]

developing such a method will probably be conducted, however, this summer at the Tech Center.

C. Complete validation experiments on the solid sorbent formaldehyde method.

Rating
1. Complete by end of 1979.

Status

See "B" above.

D. Develop an acceptable thermal desorption monitoring method for methanol (including the design of validation experiments).

Rating
1. Complete by the end of 1979.

Status

We have expanded this objective to include the development of acceptable thermal desorption monitoring methods for methanol, acetaldehyde, acetic acid and vinyl acetate by the end of the year.

E. Assist the Pampa Plant in completing a comprehensive industrial hygiene welding survey (including determining the analytical requirements of the survey).

Rating
1. Complete by July 1, 1979.

Status

The Pampa welding study was completed during May, 1979. As you are aware, this study identified serious occupational over-exposures to nickel and chrome (VI). As a result of this survey, respirator requirements are being implemented Corporate-wide. Mark Stenzel played a major role in coordinating and directing this overall study.

F. Define the industrial hygiene monitoring requirements for the Terminals.

Rating
1. Complete (and report issued) by February 1, 1979.
2. Complete by March 1, 1979.

Status

in late March, 1979.

G. Complete the industrial hygiene monitoring studies at the Terminals (including the coordination of the analysis of the samples with the Technical Center and outside laboratories).

Rating
1. Complete by August 1, 1979.

Status

Limited progress has been made in this area. The method validation program at the Tech Center this summer will hopefully provide methods for doing much of the sampling at the Terminals. We must significantly increase the industrial hygiene support that we are providing our Terminals.

V. Assisting the Corporation

A. Assist the other Operating Companies in defining their medical surveillance requirements.

Rating
Grade on effectiveness.

Status

We have made major progress in assisting other operating companies in defining their medical surveillance requirements. We presented an all-day seminar in New York during February for all the operating companies. Presentations were also given at the Corporate Loss Control Conference in May on the Chemical Company Medical Surveillance Program. Furthermore, we have had numerous telephone contacts with the other operating companies, and have visited both Summit and Louisville to discuss our exposure zone concept. Also, comprehensive workbooks of our project have been disseminated to all operating companies within Celanese. The Chemical Company training programs on benzene, carbon monoxide, methanol, medical surveillance and toxicology are in significant demand with the other operating companies. They have been used in Fibers, Plastics, Celanese Canada, Charlotte headquarters, New York headquarters, etc.

B. Provide Chemical Company training programs to the other Operating Companies.

Status

See "A" above.

C. Assist the Corporation in defining TSCA requirements for the computerized "chemical inventory" system.

Status

As previously stated, the Chemical Company has played a major role in defining toxicity requirements for the computerized chemical inventory system. The Chemical Company inventory system is being expanded into the Corporate TSCA chemical inventory system.

D. Assist the Director of Product Safety and the other Operating Companies in evaluating new products.

Status

No progress in this area.

E. Provide analytical support as requested.

Status

Analytical support has been provided to all other operating companies in the area of monitoring of welding fumes. We have also disseminated our acrylate monitoring methods to other operating companies.

F. Coordinate the Company Industrial Hygiene and Toxicology program with the Corporate program in order to avoid conflict.

Status

As you are aware, considerable conflict has resulted with our attempt to coordinate the Chemical Company toxicity testing program with Dr. John Clary. In spite of this, I feel that progress has been made. Much of our conflict has resulted because of a major difference in philosophy as to whether the toxicity testing program should be a strong Corporate program or one controlled by the Company and coordinated by the Corporation.

VI. Special Projects

A. Sponsor a Texas A&M student in an industrial hygiene summer program.

Status

Mr. Rod Simmons, graduate student from Texas A&M is presently conducting a method validation program at the Tech Center under the coordination of Mr. Mark Stenzel.

VII. TSCA

Status

One substantial risk report was processed during the first half of 1979. The Company and Corporate procedure worked extremely well in evaluating the Clear Lake report on acetic acid. No substantial risk was indicated.

B. Work closely with the Technical Center and other organizations in assisting compliance with all TSCA-related requirements, such as premanufacturing notification, etc.

Status

Two key meetings have already been held with Tech Center management to coordinate present and proposed TSCA-related requirements, including pre-manufacturing notification. Nevertheless, we need to increase our efforts in working closely with the Tech Center in the area of TSCA-related programs. Depending on medical surveillance manpower requirements, Grover Vos will attempt to conduct this study during the last quarter of 1979.

VIII. Noise Control

A. Determine whether the noise monitoring program should be coordinated by our Department and conducted by the Plant Industrial Hygienists.

Rating
1. Complete by March 1, 1979.

Status

Presently, no focal point has been established either at the Company or Plant level to direct a noise monitoring program. Grover Vos has been assigned the task of evaluating the Company's current situation with regard to noise monitoring and control. This task will commence late this summer or in the early fall.

B. Establish a noise monitoring program at each facility.

Rating
1. Initiate program by July 1, 1979.

Status

Recommendations concerning the establishment of noise monitoring programs at each facility will be included in the results of Mr. Vos' evaluation.

IX. Customer Service

hygiene and toxicology.

Status

Customer service requests are being coordinated by our department on a weekly, if not daily, basis. Many of our customers are confused and frustrated because of expanding governmental requirements involving FIFRA and TSCA. I envision our customer service responsibilities increasing significantly during the next year.

B. Develop an improved system for filing all customer requests, customer complaints, and responses (system should meet all TSCA requirements).

Status

Minimal progress to date. This objective will be one of the main responsibilities of the proposed Environmental Health Specialist position in our department.

X. Become knowledgeable of the Transportation Emergency Response Guidelines.

Moderate progress in this area. Our department presently serves as consultant to the Emergency Response Program. We have recently been requested by Mr. Herb Reed to develop toxicology press releases on each of our products. We hope to work jointly with Dr. John Clary in completing this request during the latter half of 1979.

XI. Miscellaneous

A. Coordinate the industrial hygiene review of all new facilities, major RFA's, etc.

Status

Moderate progress has been made in this area. We have worked closely with the Bay City Plant in evaluating the necessity of extensive engineering controls to limit methanol exposure in the nylon salt unit. We need to significantly increase our efforts in this area. Grover Vos will be working closely with the Tech Center in evaluating new processes early in the development and evaluation stages.

B. Assist the Plants in developing engineering and work practice controls to alleviate potential health hazards.

Status

Significant progress has been made in working with the

Plants in developing controls to protect welders, employees played an active role in evaluating the proposed acrylic acid inhibitor at the Clear Lake Plant.

C. Develop a policy for the industrial hygiene monitoring of contractor employees.

Rating
1. Implement policy by March 1, 1979.

Status

A policy was developed and proposed to the Plants prior to March, 1979. The new policy has been partially implemented at the Plants. However, follow-up needs to be conducted to promote a thorough understanding of our new policy by major contractors, such as Arthur Brothers. The Chemical Company policy, again, is being expanded into a Corporate guideline.

D. Represent the Company in the Formaldehyde Institute.

Status

I have not played an active role in the Formaldehyde Institute during the first half of 1979. However, I have kept Marketing and Management informed of the status of the Institute, and I did work closely with Dr. Dave Medley in writing his introductory speech. It was presented at the opening meeting of the Formaldehyde Institute.

E. Coordinate the Company Industrial Hygiene and Toxicology Program with the Employee Relations Organization.

Status

I have worked closely with Mr. Bob Swanbeck and the Plant Industrial Relations Organization in coordinating our Industrial Hygiene and Toxicology program. Overall, I am pleased with our efforts in this area. However, we must continue to actively support this area since Industrial Hygiene and Toxicology can be easily misunderstood by both management and our employees.

F. Advise management on the potential impact of new or proposed Federal regulations (such as OSHA, EPA, FIFRA, etc.)

Status

Most efforts in this area have been directed through the Company Product Safety Committee and the direct involvement at the Tech Center in the area of TSCA and

premanufacturing notification. We need to play a more significant role in apprising management of the impact

G. Assume responsibility for coordinating the FIFRA program.

Status

Our department assumed partial responsibility for FIFRA in January, 1979. Complete responsibility for FIFRA, including responsibilities for obtaining FIFRA registration of Celanese products, was assumed by the department in May of 1979.

H. Review the Company's Occupational Health Policies for possible revision.

Rating
1. Complete by June 1, 1979.

Status

No action at present. I hope to review our occupational health policies during the last quarter of 1979 for possible revision.

I. Develop internal permissible exposure limits (PEL's) when applicable.

Status

Although we follow informal procedures in developing internal permissible exposure limits, I am satisfied with our performance in this area.

J. Provide meaningful input to the regulatory agencies.

Status

We are channeling Chemical Company comments on proposed regulations through Dr. Lee Starr's organization for formal input to the regulatory agencies. We are presently commenting only on major proposed regulations such as pre-manufacturing notification due to limitations in manpower.

SUMMARY: Overall, I am extremely pleased with the progress our department has made against our 1979 objectives. Our major project from a manpower standpoint will continue to be the Health Monitoring Project through the end of 1980. Increasing record-keeping, filing, and administrative requirements associated with TSCA, FIFRA, the chemical inventory system, and the toxicity testing program have necessitated the addition of an Environmental Health Specialist to our department. Assistance

in this area will free Mark Stenzel, Grover Vos and myself to resolve more pressing problems.

DAVE BARRETT

CDB/dr