

→ BETH RUSERT
FYI - DIANE

TEXAS CITY/LA MARQUE COMMUNITY ADVISORY PANEL

WEDNESDAY, MARCH 5, 1997

6:00 - 9:00 p.m.

Amoco Chemical
2800 FM 519

We will be meeting *inside* the plant in a larger meeting room.

No sandals or high heels.

When you turn into Amoco Chemical, go straight to the *main gate* rather than turning into the administration building visitors' parking lot. The guard will tell you how to reach the Maintenance Lunch Room, where you will park and we will meet. The mini-tour will leave from there also.

5:00 — optional mini-tour of new para-Xylene 3 unit
We'll leave from the Maintenance Lunch Room at 5:00 p.m. sharp.

HEALTH STUDIES

What CAP companies know about the health of their employees:
Studies presented by Union Carbide and Amoco Petroleum

If you *cannot* attend, please call Jan Ketcham at Union Carbide at 409/948-5181
or Diane Sheridan at 281/326-5253

FUTURE MEETINGS

6:00 - 9:00 p.m.

Thursday, April 24, 1997 — Amoco Refinery
Tuesday, May 20, 1997
Monday, June 16, 1997

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STLCOPCB4037387

MEETING NOTES

TEXAS CITY/LA MARQUE COMMUNITY ADVISORY PANEL

Thursday, February 13, 1997

Holiday Inn – LaMarque
hosted by ISP

The 56h meeting of the Texas City/La Marque Community Advisory Panel (CAP) was held on Thursday, February 13, 1997 from 6:00 - 9:00 p.m. at the Holiday Inn – LaMarque, hosted by ISP. Regrets were sent by Abel Garza, Jimmy Jimenez, Linda Lee, and Terry Ray. The January meeting notes were approved without change.

ATTENDANCE

CAP Members

Phil Flake
Virginia Gill
Cathy Gillentine
Rita S. Harrington
Warren Jones
Mike Lee
Charles Westerlage
Charlotte Westerlage

Industry Liaisons

Rich Bedell, Marathon Oil
Jack Brinly, Amoco Chemical
Joe Concienne, Basis Petroleum
Dick Keenan, ISP
Bill Morrison for Paul Saunders, Sterling
Foley Provenzano, Union Carbide
Pat Ward for Ken Mayhall, Amoco Petroleum

Support

Diane Sheridan, facilitator

Observers and Resources

Daren Beaudou, Goldman Public Relations
J. M. Boswell, Amoco
Brian Dinges, Amoco

Observers and Resources continued

Mark Dinterman, Amoco
David Dutton, Amoco
Lenora Fanuiel, LMHS
Wendy Gram, ISP
Ben Hernandez, Amoco Chemical
Charles Herbeck, Mabry, Herbeck, Chilton
Drew Jackson, Union Carbide
Karleen James, Amoco
Kim Koller, Union Carbide
Jerry Litel, Occupational Medicine Resident at
UT School of Public Health
Debra Morris, consultant in toxicology
Sharon Nalls, City of Texas City
Johnny Owens, neighbor
Mark Perry, Marathon
B. J. Poittrast, Amoco
Les Rucker, Basis
Ronnie Schultz, Galv. Co. Health District
Walt Sheaffer, retired Marathon
Delvin Sorrell, LMHS
Diana Stevens, Galv. Co. Health District
Jonathan Ward, UTMB Dept. of Preventive
Medicine and Community Health
Peri Yalemkaya, Union Carbide

PLANT UPDATES

- Foley Provenzano reported that Union Carbide's acid unit expansion project is underway, with completion expected the third quarter of this year. Several large units are currently down

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for maintenance turnarounds that include electrical repairs. The associated startups and shutdowns mean that the community has seen and may continue to see some flaring.

- Pat Ward attended for Ken Mayhall and reported on a hydrofluoric (HF) acid spill at Amoco Petroleum Products that had occurred the previous morning in Alkylation Unit #3, located in the center of the refinery. Monitoring was conducted to see if emissions went beyond the refinery, but none were detected. Based on wind direction (from the east-southeast) and this knowledge that it was not affecting the community, it was called a Level II release by the incident commander.

Twenty-seven workers reported to the Amoco medical department, and all but two were released after being checked. The two (an employee and a contractor) were sent to Columbia Mainland Hospital where they were treated for respiratory effects and skin burns. They remain hospitalized and were to be evaluated again the morning after the CAP meeting. The 27 workers were downwind and within 1-2 plant blocks of the unit.

The incident occurred at about 8:00 a.m. and is believed to have been caused by mechanical failure. Monitors and a water deluge system are in place to detect and contain releases. Both functioned as designed and the volatile emissions were knocked down before they could disperse far. Automatic control valves shut off the flow so that the rate of the leak was reduced. It was contained by 8:25 a.m., when it was downgraded to Level I. Three investigations are underway and results will be reported to the CAP when available. One is looking at equipment failure, another at the effectiveness of the mitigation systems, and the third at the response to the incident.

Amoco notified the city and coordinated with them. A CAP member who was unable to attend had contacted Sheridan and asked her to convey his concern that people knew something was happening but could not get information from either the city radio station or the cable TV crawler. He reiterated the need for people to be able to know what is happening, even if the event does not require them to shelter or evacuate. Sharon Nalls, emergency manager for the city, said that the city's emergency plan calls for messages to be placed on the city radio station and cable TV when there is a Level III release. In response to citizen concerns about this event, the city will reexamine whether there are circumstances under which Level II incidents should be publicized. The city did place a message on radio station 530AM but not when the incident first occurred. They also are resolving a software problem with the crawler. CAP members were glad the city is considering expanded use of the radio and crawler. They also asked that the city consider how to tell people what to do about sending children to school when they know that schools are sheltering in place and do not know what to do about children starting school later. Nalls said it is not clear who contacted the school(s) that decided to shelter in place without being told to do so. Nalls will report any changes in procedure to the CAP.

- Ward also reported that the Texas Natural Resource Conservation Commission (TNRCC) conducted an air inspection of the Amoco refinery; no notices of violation are expected. TNRCC suggested some improvements in paperwork/recordkeeping but these were not violations.

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- The Amoco Texas City refinery has received an internal Amoco safety award for its safety performance as well as for safety programs that involve workers.
- Rich Bedell informed CAP members that about 600 contractors and a lot of cranes are on site at Marathon for a maintenance turnaround. Units will begin to start up again on March 2.
- Marathon had a leak in a temporary tank on February 5. It held hydrocarbons. The plant siren was sounded.
- Marathon is a semifinalist in the competition for the Governor's Environmental Excellence Award. The 1997 winner will be announced later this spring. Sheridan passed around a draft letter explaining their role in the CAP and what the CAP does; no changes were suggested. It provides factual rather than promotional information and will be submitted with Marathon's application. Amoco Chemical was last year's winner. CAP members appreciate efforts that help others see Texas City in a positive light, such as these awards.
- Representing Paul Saunders, Bill Morrison reported that Sterling had a small fire on 2/5/97 in the phthalic anhydride unit during startup.

OTHER UPDATES

- The local Earth Day celebration is slated for April 12, with the specific site still to be selected. It will include a dike cleanup, booths, and environmental games. Details will be provided at the March CAP meeting.
- TNRCC is sponsoring a community workshop on the SARA Title III Toxic Release Inventory (TRI) on Friday, March 7 from 12:30 - 5:00 p.m. at Rice University. Brochures were handed out and are enclosed for absentees. The workshop will include training in how to use the computer to access TRI data.
- Sheridan offered members an article from the Galveston Bay Foundation newsletter providing a history and update on the Wallisville project and freshwater inflows to Galveston Bay. Absentees who wish a copy may contact Sheridan at 281/326-5253.

Update on Clean Star Project

Charles Herbeck updated the CAP on the Clean Star project. The project began when the city's Environmental Protection and Emergency Response Committee learned EPA was planning to conduct a multi-media audit of about 60 local businesses after reviewing SARA Title III Toxic Release Inventory data for the city. The major industrial plants that sponsor the CAP were among the 60 businesses, which obviously also included a number of small businesses.

The city began to meet with EPA and TNRCC to see if there was a way to establish a program that would promote pollution prevention as well as compliance with laws and regulations. They looked for similar programs, but found none. To make such an effort work, businesses would have to be willing to volunteer to participate. They decided to start by working with heavy

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industry but the program would also conclude small businesses as well as self-evaluation by the city of its own activities.

The committee learned there is a state law relating to environmental audits, which regards as privileged the information uncovered in the process and provides those who conduct voluntary audits with amnesty from penalties. Twenty-two states have passed audit legislation. EPA has an audit policy, which is not as broad in regard to privilege.

Committee progress in designing the program was halted recently when EPA headquarters told EPA Region 6 to suspend meetings for 30 days. Herbeck agreed that the committee will make a more comprehensive report to the CAP in April to seek their input if the project moves ahead, as he hopes it will.

Among the ideas being considered to help small businesses is having a technically-trained, small business evaluator who could also provide advice on compliance with regulations. Small businesses usually have fewer than 100 employees.

HOW TO LEARN IF THERE ARE HEALTH EFFECTS FROM LIVING IN AN INDUSTRIALIZED AREA

Dr. Ralph Morris, director of the Galveston County Health District (GCHD), provided a comprehensive overview to help members learn how to answer the question in this title and why it is hard to do so. A former Public Health Service official, Morris came back to Texas City in 1985 as the health officer for Galveston County. He arrived with two major concerns about public health: dealing with catastrophic events like hurricanes and responding to environmental exposures and disasters. He noted that the 1987 hydrofluoric acid spill at Marathon was a learning experience for all involved.

Morris's handouts are enclosed for absentees. Because they provide detailed coverage of his presentation, the notes that follow do not duplicate what is in the handouts. Morris covered the frustration of knowing different conclusions can be derived from the same data, the way people perceive risk and risk information sources, the medical conditions found normally, toxicology terms and principles, the epidemiological triad (agent, host, environment), the importance of epidemiology, the kinds of epi studies, the factors that determine a community's response to a toxic agent, and the variables that make it hard to give definitive answers. He reviewed the HF study and ended his discussion with data on cancer and the other causes of death in Galveston County.

Members found interesting the chart showing what the status of a community's health is likely to be at any given time without exposure to hazards such as industrial facilities. In essence, it shows "background levels" for various symptoms such as irritated eyes, sore throats, etc. Members asked why a higher percentage of females had the various symptoms. Morris speculated that it is because women live longer, and they are usually more aware of their bodies than men and less likely than men to deny the symptoms.

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Morris said that epidemiology is the basic science of public health doctors since it looks at groups rather than individuals and noted it is like detective work. As the GCHD director, he also uses epidemiology to help make policy decisions.

CAP members found helpful the descriptions of the kinds of epidemiological (epi) studies that can be conducted, and their pros and cons. They asked if they can be done retrospectively. The most common epi studies are retrospective; for example, the investigation of why a group of people at a picnic got sick to their stomachs. GCHD does this kind of study almost daily. Prospective studies are the most expensive. The best known is the Framingham, Massachusetts study that began 20-30 years ago and followed people to look for cardiovascular disease and risk factors. Some studies are called case-control studies because they study the difference between those with illness (the case) and those without (the control). For example, what did those who got sick at the picnic do that those who did not get sick did not do. Cohort studies follow a group over time, as the Framingham study has done.

Prevalence or cross-sectional studies look at a given population at a given moment in time for the presence of disease or exposure. The study GCHD conducted after the 1987 hydrofluoric acid (HF) spill was this type of study. Morris indicated that these studies are common but they are not strong studies in that they rely on self-reported data. Exposures are often unknown, which make it harder to draw valid conclusions. While weak, these studies are sometimes the only kind that can be done. Those reviewing prevalence studies need to avoid overstating the conclusions.

A cluster investigation is done to see if the perception that there are more than the expected number of cases of a disease is true. GCHD has conducted a cluster investigation in Texas City for leukemia. Sometimes clusters are just coincidental but other times a cause is found. Exposure registries are done at Superfund sites. Another kind of study is a health statistics review where the data from your community is compared to that of other communities or the state or nation.

Morris spoke highly of biomarker studies because they are based on objective, clinical tests rather than subjective information. Not all exposures can be tested this way but exposure to HF can because it leads to decreased calcium. Discussion revealed that some tests, like urine tests, are cheap but others can cost \$1000 or more each. Changes in the financing of health care have reduced the number of tests doctors and hospitals perform and may make it harder to collect such data if the community is ever exposed to something like HF.

Morris said that stress can be a major factor when there is an exposure, though doctors often discount its significance. He felt the HF study did not do enough to look at the stress that came from knowing there was a release that affected the community, even if you yourself were not exposed. He said that doctors are becoming more aware that stress affects infectious agents and need to understand that it also affects chemical agents.

Stress is only one of the factors that make it hard to find distinct causes for diseases. Much of what could come from environmental exposure can also come from other sources.

Morris stated that the October 31, 1987 HF spill was the first widespread community exposure to such a toxic agent and that the study is still controversial. The study tried to evaluate the impact

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of the spill on the community, though it did not begin till 18 months after the event. Toxicological data available looked at death from acute exposure to HF, but the literature did not provide much information about non-lethal conditions. The study concluded with an April 1993 report showing an excess number of self-reported health problems up to 2 years after the study, most affecting eyes and lungs. The findings have to be interpreted with caution because the exposure was uncertain, self-reports inherently are biased, and lawsuits affect reporting. More definitive conclusions would have come from a cohort study of those actually exposed that started with hospital testing and followed them over time. This would have addressed the issue of whether there are long-term effects from short-term acute exposures. Some believe HF is only a problem in the short term while others believe there can be long term effects from acute exposures. Should such an incident happen again, Morris would push for resources from government or industry to conduct a better study. He acknowledged that the cost could be high, which is why people may settle for cheaper but less effective studies. Members asked if the health district was prepared to tell hospitals what kind of testing to do, depending on the chemical to which people are exposed. In other words, have they looked at the chemicals where major exposures are possible and determined whether exposure can be tested. No action plan to do this is in place.

Morris ended his presentation with data on the causes of death in Galveston County that show five cancers for which there are excess deaths here when compared to the numbers expected based on deaths in the state. Some diseases are less prevalent here. There are no definitive answers as to why lung, digestive tract, breast, leukemia, and oral cancers are higher. Factors may include the presence of UTMB, which provides indigent care for people from around the state, as well as the greater use of tobacco for smoking and chewing among blue-collar workers and their higher population in the county. Morris showed a Public Health Service chart of the causes of death that indicate which premature deaths are preventable. It shows a relatively small number are caused by toxic agents versus the top three causes but discussion advised that we should be trying to prevent premature deaths from any cause, not just the top causes.

Members thanked Morris for educating them about the ways to find out whether there are health effects from living in an industrialized area and for providing data on the causes of death in this area.

UPCOMING MEETINGS

Wednesday, March 5, 1997 - 6:00 - 9:00 p.m. - Amoco Chemical - mini-tour at 5:00 p.m. presentations by plants with studies on plant employees

Union Carbide and Amoco Petroleum Products will share epidemiological and other studies on the health of plant employees. (If ISP has mortality data, they also will present it.) The meeting will be preceded by an optional mini-tour of Amoco Chemical's new para-xylene unit. The location has been moved inside the plant to a larger room.

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Thursday, April 24, 1997 – 6:00 - 9:00 p.m. Amoco Refinery – mini-tour at 5:00 p.m.

If the Clean Star project is moving ahead, the committee will present its components and seek CAP input. If not, the CAP will continue its series on health-related topics by learning more about industrial hygiene and the role it plays in determining whether there are health effects from living in industrialized areas.

**Tuesday, May 20, 1997 – Marathon hosts
Monday, June 16, 1997 – Basis hosts**

Tentative Meeting Hosts

April 1997 – Amoco Petroleum
May 1997 – Marathon
June 1997 – Basis Petroleum
August 1997 – Sterling
September 1997 – Union Carbide
October 1997 – ISP
November 1997 – Amoco Chemical
January 1998 – Amoco Petroleum
February 1998 – ISP
March 1998 – Amoco Chemical

1996-97 coordinator – Union Carbide - Jan Ketcham
1997-98 coordinator – Amoco Chemical (starts 10-97)
Previously served – Sterling, Amoco Petroleum, ISP, Basis, Marathon

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