

THE
OTHER
SIDE
OF

LOVE
CANAL

Facts vs. Fallacies

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A presentation before the
Financial Community Representatives
from New York, Philadelphia, Boston and Hartford

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Dr. Armand Hammer

I wish that time permitted me to expand on two of my very favorite topics, the excellent earnings of Occidental and our country's most likely answer to the OPEC created energy problems, namely oil shale. As you will see from our six month progress report the earnings for the second quarter rose 51 percent, to \$161 million on sales of \$3 billion. For the first six months of 1980, earnings were up 133 percent to \$439 million on sales of more than \$6 billion.

Oil shale is something I could talk to you about for hours, but I will exercise great restraint and limit myself to several minutes. I don't know how many of you know that in the three states of Colorado, Utah and Wyoming, there is an estimated 1.8 trillion barrels of shale oil. Our company is a leader in producing oil from shale. I'm sure many of you know that we have developed a proprietary underground

process, called modified in situ, for recovering the oil from the shale in commercial quantities, and with complete attention to acceptable environmental considerations. Ninety patents have already been issued to us for this process and sixty-seven more are being processed. We have invested over \$100 million of our own funds into this project during the past seven years. Last year Tenneco agreed to spend \$110 million to become a half-partner in our C-b tract which is estimated to contain 1.2 billion barrels of recoverable oil. In the Oxy process, we remove 20 to 25 percent of the shale by hollowing out an underground chamber — or retort — in order to gain access to the shale and then explode the nearby shale until the retort is filled with rubble. We then set fire to it with a gas flame introduced on top of the pile. When the heat reaches 900° F, the oil separates from

the shale and drops to the bottom of the cavity. We pump it into storage tanks and transport it by pipeline. Our last retort — Retort 6 — was as high as a 30-story building and an acre in area. It produced over 50,000 barrels of oil which is 40 percent of the oil in place, and which is well above the U.S. average for conventional drilling. We shipped some of it to Chevron, where they use it to make all sorts of test products, including jet fuel, gasoline and a whole range of chemicals. All this information was published by them.

We believe our process can be used successfully, commercially and in an environmentally acceptable manner. We and Tenneco are now proceeding with the development of a commercial project known as the Cathedral Bluff's project on the C-b tract. We are presently sinking shafts which have reached a total of 1,300 feet and are said to be the largest shafts of their kind in the United States. We estimate, based on engineering reports from Fluor, Dravo and Parsons, that we can produce 50,000 to 60,000 barrels per day from the C-b tract at a price competitive with OPEC oil. If we can retort the 20 to 25 percent shale which we remove to an aboveground retort, we can increase this production to 80,000 barrels per day and, of course, the cost per barrel will be still lower.

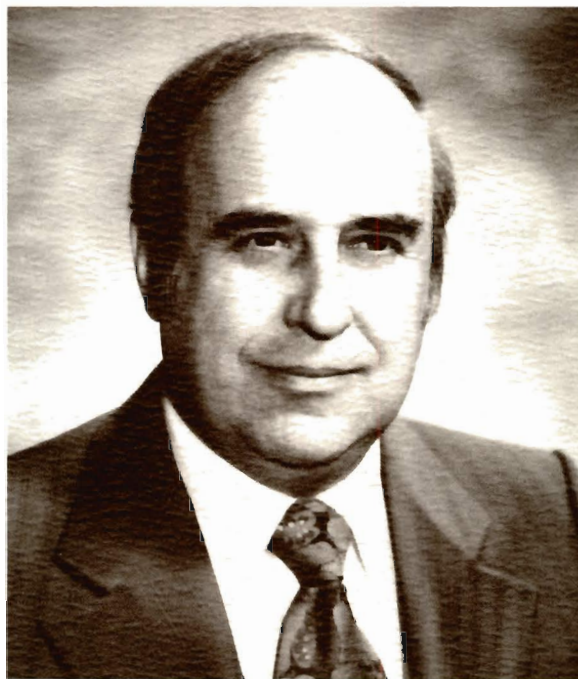
Donald L. Baeder is going to speak to you in detail about Love Canal and other Hooker environmental matters. I'd like to tell you what we have done and what our philosophy is at Occidental Petroleum in this regard.

The attorney general of the state of Michigan, the Honorable Frank Kelley, in his own words said it better than we could when he testified recently before the U.S. House of Representatives' Science and Technology Committee, the subcommittee on natural resources and environment. I'd like to quote him in part, "Due to the board of directors of Occidental Petroleum Corporation, Hooker Chemical's parent company, and the efforts of

Occidental's attorney, Louis Nizer, we were able to reach a sound environmental solution of the problem at Montague. Dr. Hammer has been willing to forego possible legal defense and has opted instead for responsible corporate action to ensure the public's health and safety. The fifty-year abatement program which will cost Hooker somewhere between \$14 and \$20 million has been hailed by scientists and environmental experts as a new model for toxic waste settlements." He continued, "I hope that Dr. Hammer's fine example will become the norm in both industry and government and that the heads of industry and government will intercede to instruct their subordinates to take responsible action to protect the environment."

Hooker has been developing and implementing remedial programs at the waste site properties it presently owns and is doing its best to take advantage of advances in technology. In California as well as in New York, Hooker is meeting with both local and state officials and also with the federal authorities on remedial plans. We feel certain that the cooperative effort, which was concluded so successfully in Michigan, will be the norm in other states. Occidental, working with its subsidiary, Hooker Chemical, will make every effort to opt for responsible corporate action to ensure the public health and safety.

Thank you, ladies and gentlemen, and now I want to have Mr. Baeder address you.



Donald L. Baeder

I am pleased to have this opportunity to talk to you about Love Canal, a subject that is closely identified with Hooker Chemical.

Because Hooker has been so maligned by accusations that it acted irresponsibly in its use and disposition of the canal, I would like initially to take just a few minutes to — as Al Smith used to say — set the record straight. We can then turn our attention to the issues of whether there were or are health hazards in the Love Canal area as a result of chemicals migrating from the site and whether anyone has been injured as a result of those chemicals.

My remarks for the most part will be limited to those matters where we have documented evidence or statements by independent parties to substantiate particular points.

Love Canal was an appropriate waste disposal site. Hooker's use of the canal site as a landfill from 1942 to 1952 was not

an irresponsible operation, as some have suggested. Even with all the advantages of hindsight, a task force of the American Institute of Chemical Engineers recently concluded that the design of the canal site back in the 1940's and early 1950's would essentially conform to most provisions of present pending federal regulations. A statement by William Sanjour, the chief of the United States Environmental Protection Agency Hazardous Waste Implementation Branch, commenting on Love Canal on June 30, 1980 also supports this conclusion:

“Hooker would have had no trouble complying with these [federal RCRA] regulations. They may have had a little extra paperwork, but they would not have had to change the way they disposed of the wastes.”

There have been suggestions that Hooker "foisted" the site upon an unsuspecting local school board, that adequate warnings were not given that the property had been used as a chemical landfill and that care needed to be exercised to avoid disturbance of the protective cover we had placed upon the property. The deed to the school board, the minutes of the school board meeting, correspondence between Hooker and the school board and articles from the local Niagara Falls newspaper clearly reflect that adequate warnings were given by the company regarding the condition of the property and the proper precautions to be taken in its use.

The following excerpt is from the minutes of the board's November 21, 1957 meeting:

"It was pointed out that, although it was not so stated in the deed, there was a mutual understanding that the property would be used only for the construction of a new school and the maintenance of a park.... A copy of a communication from the Hooker Electrochemical Company to the superintendent of schools, stated the administrative officers and the members of the Board of Education knew of this restriction. Mr. Wilcox stated that they (Hooker) feel very strongly that subsoil conditions make any excavation undesirable and possibly hazardous; he urged that arrangements be made to use the property for the purpose intended since additional park or recreational facilities in this area are desirable."

On November 22, 1957 the Niagara Falls *Gazette* reported that A. W. Chambers, of Hooker's legal department, said:

"There had been an unwritten understanding at the time of the gift that the board would not dispose of the land in any way that might lead to digging or construction work. There are dangerous chemicals buried there in drums, in loose form, in solids and

liquids. It was understood the land would be used for a park or some surface activity if it was developed."

I'd also like to quote the school board's legal counsel. On May 7, 1953 Ralph A. Boniello, the school district deputy corporation counsel, told the board that the deed:

"...provides specifically that the Board of Education has been advised by the Hooker Electrochemical Company that the above premises have been filled, in whole or in part, to the present grade level thereof with waste products resulting from the manufacturing of chemicals by the Hooker Company, and that the board assumes all risk and liability incident to the use thereof."

He also stated:

"In the event that the board shall accept this deed, it is my opinion that there is placed upon the board the risk and possible liability to persons and/or property injured or damaged as a result thereof arising out of the presence and existence of the waste products and chemicals upon the said lands referred to in the said deed."

Before Hooker made the decision to transfer the property, tests and inspections were made on the site to determine that the clay walls had not permitted the leaching of the chemicals, and no drums of chemicals were placed within four feet of the natural surface. When the property was transferred, there was an understanding the canal site itself would only be used as a park. That use would not in any way have disturbed the site and, in my opinion, the chemicals would today be safely protected. In fact, New York State has in the past year proposed to convert the site to a park after completion of the remedial program.

What went wrong? The problem of chemicals migrating from the Love Canal, according to the task force previously cited, was in large part attributable to the failure of others to

properly maintain the site during the twenty-seven years since Hooker relinquished control of it. In direct disregard of Hooker's public warnings, three streets together with storm drains and sewer lines were built across the property by the city of Niagara Falls and the state of New York. The school board's records reflect that thousands of cubic yards of materials were authorized by the board staff to be removed for use as fill at other locations. Eventually these intrusions permitted surface waters to seep into the site and, in 1976, after there had been record precipitation, the canal, like a bathtub, overflowed permitting chemicals to migrate onto the properties adjoining the canal.

As a result of our work with the local government agencies and the school board, a remedial program was developed to prevent any further migration of chemicals from the site. This program is essentially what the state of New York subsequently implemented. Interestingly, the total cost for that program as then devised would have been less than \$2 million.

Love Canal, as you know, became a national media event in August 1978 when the New York State Commissioner of Health, Robert Whalen, declared a health emergency. The commissioner's recommendations called for the temporary relocation of families with pregnant women and children younger than age two from the first two rings of homes around the canal. It is estimated this would only have affected approximately twenty families. His action, which may well be questioned in the years ahead, was based on the purported presence of chemicals in basements of homes contiguous to Love Canal and purported higher than expected incidence of spontaneous abortions, miscarriages and congenital malformations. Even if these chemical levels are accepted, they were not a hazardous level, as I will demonstrate shortly. Fear and anxiety pervaded the Love Canal population following the emergency declaration. These were primary factors in the decision of New York Governor Carey, only five days later, to purchase the homes of 236 families and pay for their permanent relocation.

Table I

COMPARISON OF HIGHEST VALUE AIR SAMPLE
CONCENTRATIONS INSIDE BASEMENTS WITH WORKPLACE STANDARDS
(parts per billion permissible)

<u>Compound</u>	<u>N.Y. State Highest Value</u>	<u>EPA Highest Value</u>	<u>U.S. Workplace Standards</u>
Chloroform	5	3.0	10,000
Trichloroethylene	13	2.7	100,000
Tetrachloroethylene	170	7.0	100,000
Chlorobenzene	52	0.8	75,000
Chlorotoluene	1,300	40.0	50,000

With respect to exposure levels to chemicals among Love Canal residents, media coverage has created strong perceptions, many of which are wrong.

Based upon analysis of data we've recently obtained under the Freedom of Information Act from the Environmental Protection Agency, exposure to chemicals in Love Canal homes was very low. These exposure levels should not have been used as a basis for relocation. The original air data included in Commissioner Whalen's September 1978 report, "Love Canal — Public Health Time Bomb," are shown on Table I.

We also have shown the concentrations for these same chemicals measured by a contractor working for the EPA. The table also lists the permissible workplace standards for the nation. These standards are for continuous 8-hour-per-day working environments over a lifetime and contain what the government considers appropriate safety factors. As you can see, the concentrations measured by New York State at Love Canal and those measured by

the EPA contractor are far lower than those permitted under comparable government workplace standards.

All samples shown on Table I were for basement air. Several ring 1 homes were analyzed for chemicals on the first floor. Only in the case of one home were measurable levels found on the first floor. Chemical levels detected in basements of homes beyond the first ring were sharply lower than for homes in ring 1. The mean levels for ring 2 were 5 percent of the mean for ring 1.

The air studies done for the EPA represent the most accurate evaluations done to date and show Love Canal results prior to the installation of the remedial program. These studies were released in early 1979 but were not publicized by EPA.

I'd like to show you one more table to give you some additional insight into this important issue.

Table II compares 1978 Love Canal outdoor values with outdoor samples taken in Rahway, New Jersey, an industrial city, and Phoenix,

Table II

EPA CONTRACTOR DATA
COMPARISON OF ANALYSES OF OUTDOOR AIR
AT LOVE CANAL, RAHWAY AND PHOENIX
(parts per billion)

<u>Compound</u>	<u>Love Canal</u>	<u>Rahway</u>	<u>Phoenix</u>
Chloroform	7.3	5.2	0.1
Trichloroethylene	0.02	9.9	0.5
Tetrachloroethylene	0.3	3.5	1.0
Chlorobenzene	0.003	0.1	0.2
Chlorotoluene	0.09	*	*

* *Not analyzed for*

Arizona, a non-industrialized city. The data in this table came from two contractors working for the EPA. For most chemicals except chloroform, the values at Love Canal are lower than the others. Moreover, it is interesting to note that chloroform, trichloroethylene and tetrachloroethylene were probably not deposited in the canal by Hooker. Hooker did not manufacture these chemicals during the period the Love Canal was used as a disposal site.

Most of the chemicals measured at Love Canal and elsewhere in these studies are considered ubiquitous. They find their way into the environment from a variety of activities. For example, tetrachloroethylene is used very widely as a dry-cleaning fluid, both commercially and in the home.

The chemicals shown in these tables, as mentioned before, were the ones selected by New York State in its "Love Canal — Public Health Time Bomb" report. The same conclusions I have indicated for the five chemicals shown in these tables apply to the broader list of chemicals studied.

Now let us turn to the health aspects of the Love Canal situation.

The focal point of the health issue at Love Canal is whether health problems have been experienced at an abnormally high rate and, if so, whether that increase has been caused by chemicals. Analysis of health data available from the New York Department of Health indicates that the health problems at Love Canal do not exceed those which would be expected in the general population. Also, the New York Department of Health has stated specifically that no link between Love Canal chemicals and health problems has been demonstrated.

Early this year, the EPA commissioned a genetic study among Love Canal residents. This was carried out as a very limited pilot study aimed at obtaining evidence for use in the federal government's lawsuit against Hooker. The group tested was not a random sample but

a specially chosen group of thirty-six persons, most with histories of known or suspected health problems. No control group was tested simultaneously. Results were not reviewed by an objective, competent peer group before release. Little effort was made to interpret the results for the residents. The outcome was predictable — further hysteria, additional emotional battering even though the conclusions drawn from the genetic study were discredited soon after release. A new emergency had been declared and an additional 700 families were offered temporary relocation.

A few weeks ago, as a result of a Freedom of Information request submitted by a newspaper chain, the New York State Department of Health issued the results of its earlier epidemiological study, "Adverse Pregnancy Outcomes in the Love Canal Area." At the press conference releasing this study, Dr. Nicholas Vianna of the New York State Department of Health also released information regarding various other medical studies conducted by the state.

The studies reflect some interesting findings:

"...we have not yet been able to correlate the geographic distributions of adverse pregnancy outcomes with chemical evidence of exposure. At present, there is no direct evidence of a cause-effect relationship with chemicals from the canal."

"Our initial impression was that both the numbers and types of cancer were in no way unusual from that which would be expected in the general population."

"Blood testing, which was designed to screen for liver and kidney abnormalities, leukemia and other blood diseases, showed no patterns of excess abnormality....None had clinical evidence of liver disease."

"Computer analyses of the twenty-two page health questionnaire, which elicited information on some 150 different diseases

or symptoms, produced no evidence of unusual patterns of illness or other disorders. Cancer incidence was within normal limits for this population.”

“Efforts to establish a correlation between adverse pregnancy outcomes and evidence of chemical exposure have proven negative. Comprehensive studies of three households with unusually adverse reproductive histories did not produce evidence of unusual risk of chemical exposure.”

These announced results raise a question whether there has, in fact, been an excess of medical problems at Love Canal.

Only now is the government, under pressure from many groups including Hooker, instituting the type of comprehensive health study, including complete medical examinations, which should have been instituted two years ago. As a result of inadequate and often misleading information, Love Canal area residents have been led to believe that chemicals were present in their homes and in their neighborhood in dangerously high concentrations and that health problems in their neighborhood were rampant. They have responded predictably with ever-increasing demands for permanent relocation. I have sincere sympathy for the residents. The government has frightened these people.

Let me summarize: Hooker acted responsibly in its use of Love Canal. The site was excellent for landfill use and the materials deposited were properly secured. Unfortunately, and despite repeated warnings by Hooker, the integrity of the containment was later breached by others. This is a matter of record.

Chemical exposure measurements at Love Canal have been low. New York State and EPA data all show levels well within what are regarded as safe limits for the workplace. The ambient air at Love Canal is similar to that found in other urban areas.

Finally, health data collected so far does not

demonstrate that, statistically, the experience at Love Canal is unique. Ultimately, the issue of whether Hooker should be liable as a result of its earlier use of Love Canal will be settled by the courts. Hopefully, some of the information I've presented today will help you answer the question of whether anyone has been injured as a result of the migration of chemicals from Love Canal.

Evaluation of the facts as they relate to Love Canal demonstrates that Hooker acted responsibly in its use of the Love Canal as a location for disposal of chemical wastes and in its repeated warnings to the Board of Education. When new technology or knowledge has indicated a problem, or even the potential for a problem associated with past disposal practices, the company, working with appropriate government agencies, has taken immediate action.

Hooker has spent or committed, in the environmental area, approximately \$140 million and more than 200 people are directly involved with protecting the environment and the health and safety of our employees, customers and neighbors. Our company policy is “to comply with the spirit as well as the letter of the law and where helpful, in the spirit of a good neighbor, to go beyond the requirements of the law.”

Hooker is a strong company and part of the strong and diversified Occidental Petroleum Corporation family whose achievements are extremely impressive.



Zoltan Merszei

Ladies and gentlemen, in support of Mr. Baeder's remarks, I should like to add that we in management at Occidental and Hooker have committed a major amount of time to steward our environmental responsibilities and commitments. I'd like you to know that from 1977 to the end of 1980 we will have spent or committed more than \$180 million on environmental programs. Also, we will have reserved \$50 million in three years, 1978, 1979 and 1980, to cover environmental costs associated with our past operations. From this framework, significant accomplishments have resulted, and I'd like to draw your attention to one of these. So far as we know, all our present facilities are operating in substantial compliance with applicable environmental regulations or operating under special permits as we adopt new control technologies.

Between 1977 and year end of 1980, in four

years, we have invested close to \$1.2 billion to modernize and expand our chemical operations. That investment in plant, property and equipment in 1977 was less than \$700 million. Our sales have grown from \$1.6 million in 1977 and are expected to be more than \$2.4 billion this year. We have modernized and expanded our chlor-alkali facilities in the United States. We are competitive and have a competitive or better energy situation at each one of our sites. We have a new \$75 million Energy-from-Waste facility in start-up at our Niagara Falls location.

We are studying new energy complexes at our Taft plant in Louisiana, have modernized our Suwannee River phosphoric acid plant, brought on a \$270 million new plant at Swift Creek and are today a major factor in the United States fertilizer business.

By early 1981, we will have four chemical

tankers for transporting superphosphoric acid or merchant acid. This shipping capability gives us full control from rock to customer. We have major new process innovations and our research organization is dedicating a great deal of time, energy and money in that direction.

What are our goals for the future? Let me tell you what we are doing to supplement our existing business and set the stage for a major thrust in United States and international businesses. I'm not making any commitments here — no predictions, no representations. I'm expressing certain hopes and confidences which are based on our knowledge, our capabilities, as well as my own thirty-year history in the chemical business.

Wherever possible I'd like to go beyond plans and discuss new projects. With the understanding that you are aware that when you plan and when you work on projects, you have to work on considerably more projects than materialize. I have a rule of thumb that you work rather strenuously on about four projects and one probably will materialize. We intend to build on our chlorine and PVC strengths, to build jointly or on our own a major venture in the petrochemical area. We want to add some capacities, either directly or jointly, in ethylene, ethylene derivatives, polyethylene, chlorine, ethylene dichloride, vinyl chloride and, of course, PVC. We have several active programs studying these possibilities on a worldwide basis. I am hopeful that at least one of these is going to materialize within the next year or two.

Our greatest asset, the way I see it, lies in the fact that we are an oil, coal and gas company in addition to being a chemical company. I don't know of any major chemical company in the world today that is in as fortunate a position as we are with the kind of raw materials base we have, which so far, has not been utilized. We are directing our efforts to develop the desirable kind of synergism that is going to give us — or result in — a chemical business which will be built on two

fundamental positions: on brine and on oil and gas, and later, maybe, coal.

In the United States, our PVC business, as you know, is not the biggest. It is still rather small but has been a very profitable business and at the present time, it's sold out. We have a project to build a 400-to-500-thousand-ton-per-year PVC plant and these plans will be ready for board approval later this year. A new PVC plant of that magnitude is going to give us sufficient baseload for a world scale vinyl chloride monomer plant. We also have a sizable opportunity to get rid of bottlenecks at our top chlorine plant. In our phosphorus activity we are piloting a low cost thermal route to furnace grade acid to commercialize sometime in 1983. We are expanding our fertilizer business and a good proportion of our research activity is aimed in that direction.

We are looking into a variety of acquisition possibilities in the United States and this has been accentuated lately.

We have added experienced chemical executives to our staff in Europe to build from a small but profitable specialty base. We have done this in the United Kingdom principally and in other countries. We are actively exploring all opportunities from grassroots to acquisitions and mergers today. We are not ignoring — and continue to pay special, close attention to — the Eastern Bloc countries. In addition to chemicals and plastics, we are actively studying a superphosphoric chemical complex planned in Europe and are talking about the realization of a joint venture in at least two countries.

In Latin America, we have modest but strong businesses, principally in plastics fabrication, and we intend to aggressively pursue and enlarge them. There is also the case in Brazil, where we are exploring the possibility of integrating backward to our materials. In Mexico, we have Mexicanized our operations and are in a good position with the government. Not only are we looking to expand our current business but are exploring

possibilities at the present time of government agencies taking advantage of the capabilities that we already have in the United States to export those capabilities to Mexico. As you would gather, we are very bullish about that country.

In Canada, we do have a strong chemical business as part of an 81-percent-owned subsidiary of ours — Canadian Occidental Petroleum Ltd. We are there principally in specialty chemicals and some chlorine-based chemicals, and we are expanding those very vigorously.

We are also looking toward Australia and the Far East. We're evaluating a rather significant complex in Australia for brine and chlorine, as well as in the hydrocarbon area. We have recently started constructing a phenolic plastics operation in Singapore. Additionally, in China, we have initiated some major undertakings in the oil and gas area and we have several projects underway. There again, due specifically to the wonderful reception and acceptance that Dr. Hammer received in that country, they opened the doors for so many opportunities that we are dedicating our time to develop the oil and gas business, and possibly the chemical business. This is still at the initial stage but we are very encouraged by the possibilities there, too.

Hooker has had and has an aggressive program in the environmental health and safety area which is among the best in the country and we are prepared to spend our human resources as well as monetary resources to achieve this objective. Our chemical division has a portfolio of sound and well-managed businesses with very advanced technology and efficient plants. Our profit so far has been dominated by commodities — fertilizers and, of course, the chlor-alkali business. These commodities had good long-term histories but we are not satisfied with that. For this reason, we are going to expand our business in commodities, nationally and internationally, as well as in specialties.

Our sales growth over the past three years was 54 percent and our profits are now on the rise. We are determined to continue to grow, both saleswise and profitwise.



John J. Dorgan

Occidental is in a very unusual position. We currently have cash balances of approximately \$600 million. We have committed bank credits of almost \$1 billion, none of which is drawn upon. So we are in a very liquid position.

At the moment, barring some new project, we do not have plans for U.S. public financing in 1980, unless long-term rates fall to 8 percent or something of that sort. We may do some public financing in Canada, but for the parent company there are no present plans. Our capital expenditures for this year will probably be in the neighborhood of \$1.1 to \$1.2 billion and, at the moment, those expenditures are substantially financed through project financings or through drawings against our present cash balances.

We've had a goal to have our equity twice as high as our debt and our debt has been fairly steady for the last three years, right at the

billion dollar level. In May of this year we reached our goal of 2:1 and we expect to continue at that level for the rest of the year.

Questions and Answers

Question:

Does Occidental contend that there have been no injuries from chemicals dumped in Love Canal?

Louis Nizer:

Within the restraints of an attorney talking about a case which is in the midst of litigation, I can give you some facts which are in the public record and indeed limiting myself to those facts which have been issued by the state of New York Health Department.

As Mr. Baeder read, the state of New York Health Department has itself said, "At present there is no direct evidence of cause-effect relationship with chemicals from the canal." In addition to that, the report cited 114,036 separate blood tests and came to the conclusion that there was no evidence that could be stated by the report that there was abnormality — "no patterns of abnormality" is the language — in liver, kidney or leukemia or other blood diseases. This is a matter for the court to decide. I am not predicting what will come out of this but I am limiting myself to the kind of report that has been made by an independent study by the state of New York.

Incidentally, we have moved that the state be joined as a defendant in the federal action. In the personal injury cases in Love Canal, we have cross-claimed against the school board and the city of Niagara Falls, for the invasion of the protective cover of impermeable clay, which to this day is deemed among the best covers, and we have said that if there is any liability found, they are responsible for having invaded the safe cover that Hooker created.

The question as to whether there was any

injury at all must still await further tests that we and others have urged, in order to be sure that everything possible can be done. In that connection, I may tell you that there is a three year statute of limitations that applies to injuries, even if there were injuries, and that this statute has been interpreted by many courts as applying to the date of the alleged invasion of the chemicals into the person and not of the date of discovery of the alleged injury. Some of these people have claims for injuries that go back ten, twenty and thirty years; some as recent as early 1976. These claims would still be beyond the statute of limitations if this law is upheld and applied.

Dr. Hammer:

Mr. Nizer, perhaps you would also tell this group about our insurance position.

Mr. Nizer:

Hooker and Occidental have a comprehensive insurance policy program. Forty companies have 120 policies providing insurance up to \$120 million — \$100 million for general liability and \$20 million specifically for seepage and pollution. However, all but one of these companies have disavowed their policies principally on the ground that there is an exclusion clause in the insurance policies for seepage and pollution unless that seepage and pollution was accidental or sudden. We believe that the alleged damage in this case was accidental and sudden. After all, Hooker had deeded the property away twenty-seven years earlier and had no notice that there would be a seepage coming from what we claim is the invasion of the protective covering.

We have started a suit against all of these companies which have disavowed their policies to compel them to live up to their obligations. Other suits were started by some of the insurance companies. These suits are pending. While they were pending, a case came down in New York State in the

Appellate Division quite recently, called "All-State against Klock," with the precise, same exclusion clause and which interpreted "sudden or accidental" as we believe it should be interpreted and held the insurance company liable in that case. We, of course, will use this very current decision in support of our argument and if the court agrees that sudden or accidental is equivalent, as the court said, to unforeseen and unintended — and obviously we will claim that this was unforeseen and unintended — then the companies could be held liable by the court for the \$100 million; the \$20 million indeed separate because it is a specific policy. The carriers are resisting this. I make no prediction as to the outcome. I merely state the posture of the litigation at the present time.

Question:

I'd like to know if there were any other environmental lawsuits pending against Hooker and/or Occidental and if you could briefly comment on their nature if there are indeed some?

Mr. Nizer:

There are several government suits involving not only Love Canal, but also the Hyde Park site, the 102nd Street site and the S area. At the first site, there is also clay covering of some kind. In the S area and the 102nd Street area, there is virtually no population.

There were previously a number of litigations that were disposed of. One was in Michigan, in which Attorney General Kelley commented that it's extraordinary that the Air Force has been accused of violating his state's laws and they are fighting tooth and nail in the courts, whereas a private company like Occidental is willing to spend \$14 to \$15 million, waiving possible legal defenses as a good corporate citizen. He said, "It's a curious thing. You think it would be the opposite way." That suit has been settled and the work of the remedial

program is in progress.

In Hyde Park, there is a negotiation going on now with the government and experts on both sides. There have been more than twenty sessions to work out a remedial program. It has nothing to do with liability, just whether we can work out a program to put in the necessary technical things to provide a solid remedial program. They are still negotiating and if that is successful, the negotiators will then proceed to the next two sites, S area and 102nd Street.

There was also a litigation at Lathrop, California and that matter is also under negotiation with a likelihood of a remedial program to be worked out.

Perhaps you will allow me the personal privilege of making a coda — an ending — to this comment. I have all my life worked for the environment and other causes that I thought were valuable, and I take the personal privilege of telling you that I have been warmed and pleased that we are representing a company which doesn't say to its lawyers, "You tell us so-and-so on the law, so go ahead and fight them," but instead says, "Even if we have certain legal defenses, as Attorney General Kelley said, waive them and see if you can't protect the public immediately." If we go to lawsuit, there will be four or five years before the lawsuit is over. I have found this corporate responsibility warms my heart personally and I am therefore grieved at times when I see that instead of the recognition and goodwill that this should create as a lesson for other companies, the company is belabored. I believe the wheel is turning. There has been some press that has been much fairer in Buffalo and even *The New York Times*, in editorials, and certainly *The Wall Street Journal*. I hope ultimately, for the sake of really improving the environment, corporations will feel that there is a virtue in such an approach, rather than the legalistic approach. Goodwill will follow from this so it spreads as corporate responsibility.

Question:

There have been reports in The New York Times that the federal government disposed of toxic wastes in Love Canal. Is there any truth to these allegations?

Mr. Nizer:

A New York Legislative Committee reported that the government dumped materials at Love Canal during World War II. There are also three witnesses, one of whom has testified before a legislative investigator that he saw government trucks and men in uniform take out small kegs. He described them as zinc-lined. He said that they dumped them into the Love Canal. They were not Hooker kegs because the Hooker containers were fifty-five gallon drums. The government denies that they have dumped these materials. This will be one of the issues in the litigation. There is a saying that when you point a finger at somebody, you sometimes have four fingers pointed at yourself. It will be a curious thing for the government, which has attacked Hooker, to now find four fingers pointing at itself. That is the present state of the situation on the government dumping, limiting myself, at the present time, to that which is in the legislative report and the three eyewitnesses.

Question:

What about the level of profitability that chemicals are up to this year? What do you see as the recessionary impact on the chemical operations?

Mr. Baeder:

We're in a situation where several of our businesses are recovering from very difficult supply-demand situations and several are being affected by the recession. I think overall these will balance out and the predictions that we have made earlier are that we're going to achieve the level of earnings that we have stated several months ago. These, of course, are less than we had hoped because the Russian embargo has certainly reduced the level of

earnings in the fertilizer area, but in spite of that our fertilizer business has a very good chance of showing a profit this year and doing better than it did last year.

Question:

While not directly related to the chemical business, it would be very interesting to hear any comments you might have on the stability of the various sources of your oil supply.

Dr. Hammer:

I just returned recently from Peru, where I attended the inauguration of the new president, Fernando Belaúnde, who is an old friend of mine. I had the opportunity to meet the various members of his cabinet and discuss what they intended to do in connection with the new legislation in Peru. As you know, Peru is one of the important sources of our oil income. The last government — the military government — revised our agreement. We didn't have much choice. I went down there and met with them recently, working all night in hammering out an agreement. They were very anxious to get it before the new government took effect. Now, this agreement, in a way, limits our profits as compared to the profits we enjoyed previously. Nevertheless, I think under the circumstances, we did very well. You will recall there was a great hue and cry in the Peruvian press that we ought to be taxed retroactively. I'm glad that we were able to negotiate and have this removed. These taxes were paid by Petroperu with whom we had a contract.

One of the most important points I was able to negotiate was the most favored nation treatment. That is, if any other company comes to Peru and gets better terms than we have in the jungle areas where we're operating, they have to apply those same terms to us. This was extremely important because in my discussions with the incoming members of the new cabinet, it was made clear to me that they believe

that they would have to improve the terms of their contract if they are to get other companies to come to Peru.

One of the major points would be an investment tax credit. If, as I hope, one of the first things they do is to introduce this investment tax credit, I believe our earnings would be substantially restored to what they were before the change in the contract which the military government renegotiated with us.

On the whole, I'm very optimistic and enthusiastic. We have been one of the few companies that has been successful there. We have found oil where others have failed. We took over the Union Oil block from which they walked away, and we found a way of not only producing the heavy oil which they found there but we also found light oil underneath the heavy oil. We have great expectations of increasing our production there.

As far as the secondary recovery project at Talara is concerned, we will receive a fee initially of \$17.50 per barrel, together with our partner, Bidas of Argentina. We have discussed this and we are in negotiation with the government to form a mixed company in which Occidental and its subsidiary, Canadian Occidental Petroleum Ltd. (CanadianOxy), will own 49 percent. Bidas and Petroperu will own 51 percent. We expect that this new company will pay us part of our investment in cash.

You can see how attractive our position is in Peru. Even with the present contract, we'll have a very good return on our investment. I feel sure these changes will happen because the new government wants to attract foreign investors in Peru. They want to increase their oil production. They have a 50 percent unemployment rate and President Belaúnde is a very energetic, capable leader who enjoys tremendous popularity among the people. I would say Peru is going to be, in my opinion, one of the bright spots in Occidental's exploratory and oil operations.

As far as Libya is concerned, I know that's a very controversial subject. I think that's the height of understatement. Nevertheless, we've been in Libya now for some fourteen or fifteen years, and there has never been a year that we haven't had a profit. We've recovered our investment from Libya completely. We have reserves there in large quantities and we are one of several companies that has found new oil. We have several rigs in exploration and are rendering a service to the Libyan government right now because they realize that their oil is a depletable asset. The best protection we could have in Libya is the fact that they need us. We found several new fields and the return on the oil we find in these new fields is so much better than the return on the old concessions that even with the cutbacks which all the companies, including Occidental, suffered, we have been able to continue earnings from Libya on a very substantial scale. That is because they allowed us to concentrate on the fields we discovered where we receive approximately 19 percent of the gross and pay no taxes and no royalties.

As far as our other main area, which is the North Sea, I think that is the brightest spot in Occidental's oil position. There we have excellent relationships with the British government. You all know that we were successful in getting the U.K.-U.S. Tax Treaty confirmed. This will add several hundred million dollars to our earnings over the next years — I believe this year alone a little over \$50 million.

We have discovered a new field in the Claymore area. Our present platform cannot reach that field so we are building a floating platform which will take care of the expected increase in production from the Claymore field.

It's also been announced the seventh round of concession applications will be in

August and based on our record, we think we will be in a good position to get some additional blocks. We've also taken in another British partner so that at least 50 or 51 percent of Occidental's activities in the North Sea will be in the hands of British companies.

We also have production in Bolivia. Even though there are military problems there, the new military government signed an agreement with us for the development of our Porvenir gas field. This is very important because it will not only increase our income in Bolivia where we have made extensive gas and condensate discoveries, but I believe it will lead to the building of a pipeline to Brazil where we'll be able to dispose of large quantities of this gas. Aside from production in Bolivia, we also have exploration activities in Colombia, and have a very attractive 12.3 million acres under development and exploration. We believe a joint venture in Argentina has good possibilities.

We are looking at other prospects in other parts of the world, including China, where we are in seven of the eight bidding blocks with all the major oil companies. We have access to all seismic information and believe that China will be one of the largest provinces of new oil in the next decade. We hope and expect to play a role in China. I think that covers our foreign explorations.

As far as domestic operations are concerned, we appropriated \$100 million for exploration. We've been very successful in the Gulf of Mexico and offshore Louisiana and Texas. We hope and expect that our activities domestically will also lead to very successful oil production.

Question:

Could you bring us up-to-date on any new developments in the uranium exploration of CanadianOxy?

Dr. Hammer:

As far as the uranium exploration at CanadianOxy is concerned, this is potentially one of the largest uranium fields in that country. We're still defining the extent of the reserves. We've extended the discovery area considerably. We have great expectations and we're moving ahead on the development of that Canadian uranium discovery.

Question:

Could you tell us how much production you are expecting from this new important addition of reserves north of Claymore that you just commented on?

Mr. Dorgan:

I think it would be in the range of 20,000 to 25,000 barrels per day from this new fault block within eighteen months to two years.

Question:

Is Oxy exploring other synthetic fuel processes, methanol conversion, for example?

Dr. Hammer:

Yes, we're very much interested in other synfuel activities, including methanol. We have a project under study right now. We signed preliminary agreements with Bechtel and Lurgi to study the feasibility of building a gasification and eventually a methanol plant at Taft, Louisiana. We would bring coal from our Kentucky coal mines by barge down the Mississippi. This preliminary study indicates that this is a very feasible project. It will give us a chance to utilize our coal, Lurgi's technology and Bechtel's engineering capability. We've spent approximately \$60 million a year for fuel at Taft, and since the price of gas is going up, that will probably increase to \$100 million. We'll immediately have our own market for utilizing that gas from coal and we'll proceed then to study the feasibility of producing gasoline under the coal-methanol

process and also supply our neighbors in Taft, Louisiana with gas made from coal.

Question:

Will imports of ammonia be profitable for Oxy in 1981? What do you see for phosphorics? Will you be able to sell all your superphosphoric acid and why did Oxy pull out of the Phosphate Chemical Export Association (Phoschem)?

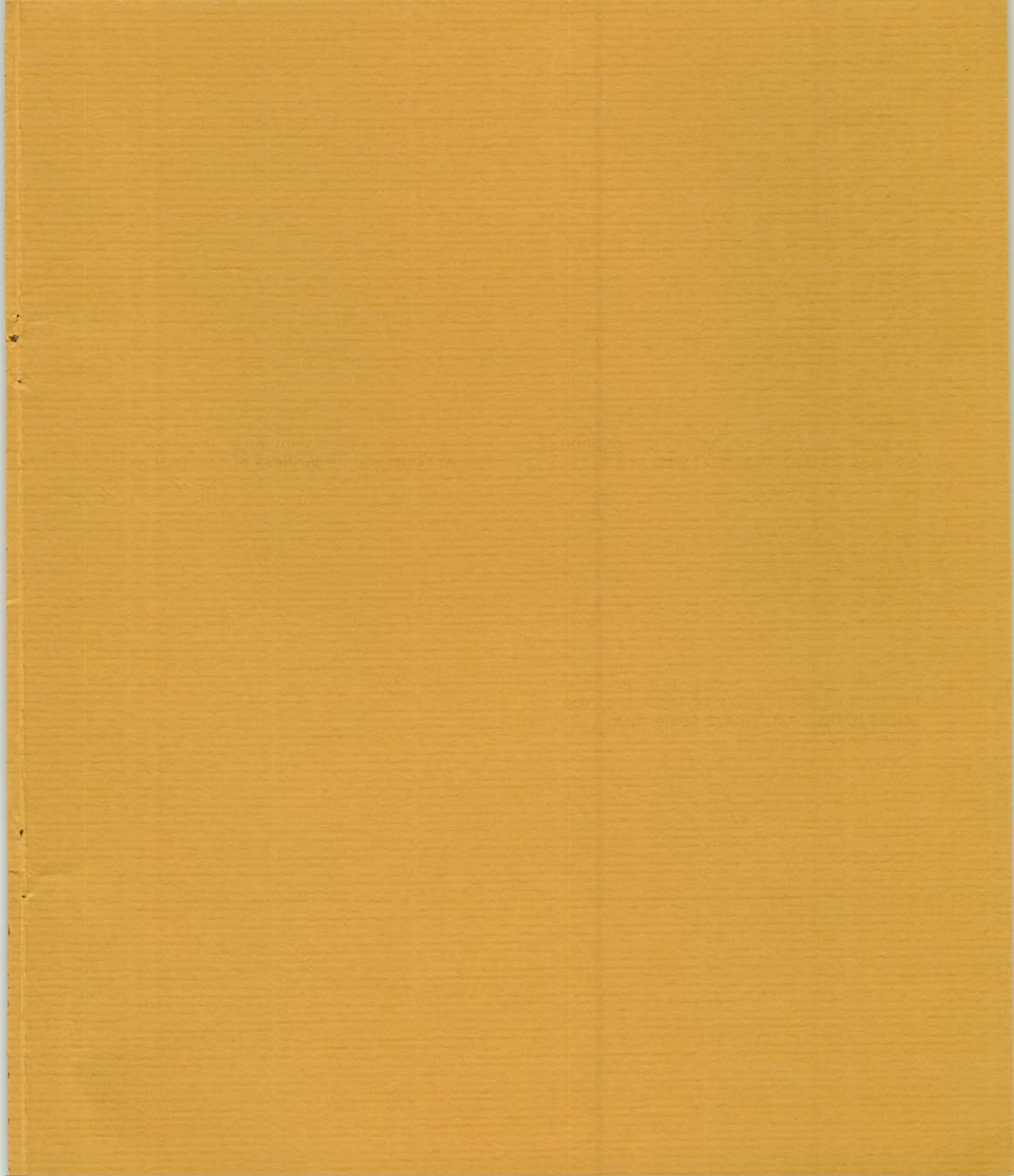
Mr. Baeder:

We are scheduled to bring in over a million tons of ammonia in 1981 and we expect it will be profitable. As for superphosphoric acid (SPA), with the embargo in place we have not been able to sell our acid as SPA and we have been forced to move it as 54 percent acid (merchant grade). I'm very pleased to tell you that with the exception of perhaps 20,000 to 30,000 tons of 54 percent acid, we're sold out for the year. We've arranged contracts with Brazil, Mexico, Turkey and Thailand. So we expect to be able to move that material, not at the margin that one can if you're willing to upgrade it to SPA, but certainly in a profitable product. We are not moving the majority of our products into the U.S. fertilizer market so that we're not heavily affected other than the supply-demand situation. We expect that to continue to tighten in 1981, 1982 and 1983, bringing prices to the point where some new capacity will come on.

The last question — why we pulled out of Phoschem? First of all, you must understand that we have an outstanding international fertilizer marketing organization, International Ore & Fertilizer Corporation (Interore). I must tell you that Interore was most helpful in placing the volumes of 54 percent acid that I mentioned and we just concluded an internal judgment that we really did not require the marketing capabilities of Phoschem to market our output. We felt that we could do a better job outside of Phoschem, and so we resigned.

We have not moved our product at lower prices than Phoschem.

I noticed that the Republican platform has already provided for removing the embargo on grain. As you know, there's a very close relationship between the embargo on grain and the phosphate embargo. I'm convinced that once the embargo on grain is removed, the embargo on phosphate will be removed. I recently went to Russia to talk with some of the government officials about next year's fertilizer contracts, and in spite of government unhappiness with the superphosphoric acid embargo, they realized what a good job we did on the ammonia. Of course, they're getting cash for the ammonia. The only one suffering is the United States on its balance of payments. I'm convinced that the embargo on grain is not working and, regardless of this year's elections, will have to be removed. I'm hopeful next year we'll see the SPA contract again enforced. It is an extremely profitable agreement and it runs for twenty years.



Occidental Petroleum Corporation



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