



A/C Pipe
Producers Association
Public Affairs Committee
International Affairs Committee

Internal Correspondence

TO *J. F. Welch*
FROM J. F. Welch, Vice President

DATE: January 18, 1982

SUBJECT Field Problem - Weston, Wisconsin

REF: (1) JFW correspondence, same title, June 29, 1981

ACTION REQUIRED: Review for information

Background

Since the last report on this matter, a number of events occurred.

On July 30, 1981, Staff was contacted by Dick Schneider, Director of Public Works. Schneider stated that he no longer was employed by the Town for reasons he characterized as "internal politics unrelated to the possible litigation with Johns-Manville." However, he alluded clearly and purposefully to "personal disenchantment and philosophical problems" with pursuing such litigation. He went on to say, "I am not a mercenary, but there are things I know about the design and operation of the Weston system that may be valuable in the preparation of a defense in future litigation." He reported that attorneys were preparing to file an action against Johns-Manville. He said it was scheduled to be filed in October (1981) but the Town wanted to prepare a "very tight case" so it was delayed. He also said Dr. William Croft (University of Wisconsin) was working nearly full time assisting the City's attorneys. This information was transmitted to Wyatt McCallie (Johns-Manville) on or about August 4, 1981.

During the period June to December, various news articles appeared in the Wausau Daily Herald (Attachment 1). These clippings were provided by the law firm of Terwilliger, Wakeen, Piehler, Conway and Klingberg, S.C.

On December 11, 1981, Staff was advised by Johns-Manville that a public meeting would be held on December 16, 1981 to "give an update on research associated with a possible law suit against manufacturers of asbestos cement water mains used in Weston." Since this field problem has been managed by Johns-Manville, Hal Olson agreed to obtain additional information on the meeting format, attendees, etc. And since AACPP had been directed by Wyatt McCallie (J-M Legal Department) not to do anything in this matter without the approval of J-M, McCallie was contacted in Nashua, New Hampshire. He agreed that AACPP should be present at the meeting.

Later that day, Olson reported on a telephone conversation with Town Attorney, Richard Weber. Weber stated that the purpose of the meeting was to advise water consumers of the findings of its expert scientist, Dr. William Croft. (Note: Croft also was the "expert" for the plaintiffs in *Walters et al v. Village of Crivitz*.) Weber reported that asbestos levels as high as 40-60 million fibers per liter (mfl) were found in the system and that the pipe was "deteriorating more rapidly than previously thought, beyond the point that it can be salvaged." Weber said the Town hired a company (unnamed) to excavate and test sections of pipe. Weber said industry representatives could attend the

meeting but could not and would not be placed on the program. Weber would not divulge the meeting participants.

On December 14, Lewis & Gilman arranged for Staff a press backgrounder with the Daily Herald. Its purpose was to express the industry's viewpoint to the public in advance of the meeting.

AACPP Counsel recommended that local counsel be contacted in advance of the meeting in order to obtain background on political and legal issues which might be discussed. The firm of Terwilliger, Wakeen, Piehler, Conway & Klingberg, S.C. was recommended. That evening Staff spoke with Douglas Klingberg. Serendipitously, Klingberg was monitoring the situation for Liberty Mutual Insurance Company, insurer for the Flintkote Corporation. Flintkote also was advised that Weston would make claim for damages for costs and expenses in connection with the alleged pipe deterioration (see JFW correspondence, Field Problem - Weston, Wisconsin, March 9, 1981). Klingberg was concerned initially about a potential conflict of interest but after discussions, it became clear that no such conflict existed.

Status of EPA Research in Weston

On December 15, 1981, Staff contacted Gary Logsdon (EPA - Municipal Environmental Research Laboratory) to determine the status of agency - funded research projects on A/C pipe rehabilitation. Logsdon reported:

1. Three sections of A/C main cleaned by a steel scraper or by "polypigs" were cement mortar lined by the Centri-line process. Well water was circulated after the pipes were flushed to determine how the lining reduced fiber counts. Asbestos analyses were in process at Montgomery Engineers.
2. An unlined A/C pipe section was flushed for a long period of time. Before flushing and after flushing samples were taken and forwarded to Montgomery Engineers for analysis.

Logsdon also reported the only water treatment used was pH adjustment with sodium hydroxide. He opined that the Town "probably needs bicarbonate treatment" because the water has a low buffering capacity. Staff neglected to ask whether the utility still used iron sequestering polyphosphates which might accelerate leaching of calcium from the pipe.

Status of J-M Contacts with the Utility

J-M's local sales engineer, Mike Krosnosky, provided an excellent historical perspective on the utility, its consulting engineers, its management, and the use of A/C pipe. He reported that waters of a low Aggressive Index (AI = 8 - 9) are common in the Wisconsin River Valley but nearly all the utilities using A/C pipe treated the water to a moderately or non-aggressive state. Wisconsin Rapids, for example, has 48 year old transmission mains which exhibit the ideal egg shell coating indicating proper water stability. Most of the pipe in Weston's system is of J-M manufacture. Krosnosky believes that in addition to Flintkote, Certain-teed Corporation also supplied pipe to Weston.

Krosnosky also reported on discussions with former Director of Public Works, Dick Schneider. He confirmed that Schneider was replaced, by George Peterson, solely for political reasons. This assessment also was confirmed by a Daily Herald reporter. Krosnosky said that Schneider knew that a large number of consumer plumbing problems existed, e.g. corrosion of water heaters, boilers, etc. These premature failures presumably resulted from the highly aggressive water provided by the utility.

Since Krosnosky was known by the Town's consultant and certain Town Board members, it was agreed that he should not attend the meeting and potentially place himself and J-M in a compromising position if asked for a public statement.

Meeting with Douglas Klingberg, Esq.

Klingberg appears to be well connected in the community. He has discretely investigated the matter with an engineer employed by the Town's consultant, Becher-Hoppe Engineers Inc. and the Town Attorney, Weber. Both these persons are unaware and should remain unaware that he is retained by Liberty Mutual and Flintkote. He also spoke with a local internist-oncologist (Dr. David Jenkins) and physicians at the Marshfield Clinic who he represents in malpractice suits. In Klingberg's words, "the consensus of the local medical community is 'if we lived in Weston we would be concerned.' "

Contact With Wisconsin Department of Natural Resources (DNR)

Staff contacted Bob Baumeister, P.E., Chief of the Public Water Supply Section, Division of Environmental Protection. He and Staff had discussions on the safety of A/C pipe during the Crivitz trial. Baumeister said Weston had sought "little consultation" from DNR since the corrosion of A/C pipe was first discovered. This was in spite of the fact that he personally offered to speak with the Town Board about the matter. Since the Town approached EPA, rather than DNR, to assist in corrective measures, there is no question that this has rankled Baumeister. In his view, "someone in Weston has built a case against DNR." It must be concluded that the individual is Dr. Croft. Baumeister said the Town also did not contact the Department of Health and Social Services which provides medical advice on contaminants in drinking water.

Baumeister said DNR attempted to obtain EPA data on system rehabilitation but Weston would not release it without EPA approval. It is the Department's intention to obtain water samples for asbestos analysis and evaluate the treatment processes currently used in Weston. He did not say when this would be done.

Baumeister said DNR made a press release (Attachment 2) on asbestos fibers in State water supplies and the Weston situation.

Media Relations

Staff met with Daily Herald reporter Don Oakland on December 16, 1981. The objective was to obtain coverage of the industry's position on the safety of A/C pipe in advance of the public meeting. Oakland is in his late twenties and is a rather straightforward individual. He listened carefully and had no preconceived notions about the issue. His article (Attachment 3) is an accurate replay of our breakfast meeting.

At Lewis & Gilman's recommendation, Staff contacted the assignment desk of the local television station, WAOW (Channel 9) and determined the meeting would be covered. The Daily Herald press coverage resulted in Staff being contacted by reporter

Todd Weiler for a post-meeting interview described later.

After the meeting, Staff contacted Oakland to advise him that the industry also wished to give a statement on the meeting outcome. This also is described later.

Weston Town Board Meeting

The meeting was held in the gymnasium of a local high school; approximately 100-150 people were in attendance. In advance of the meeting, Staff introduced himself to Dr. Croft, who was rather surprised to see me, and to Town Board Chairman Jack Allen, who received the introduction icely. Although I reassured him that the industry's presence was in the spirit of cooperation and communication, he reiterated that the AACPP would not be given an opportunity to present its views. Moreover, in his introductory remarks Allen specifically stated that the meeting participants would only receive questions from water consumers.

Presentation by Dr. William Croft

Dr. Croft reviewed his credentials, giving particular attention to his educational background. He stated that he had fifteen years experience in cancer research and was associated with the Department of Oncology at the University of Wisconsin, but made no mention of the fact that his assistant professorship is with the Department of Veterinary Sciences. Croft represented himself as "an onocologist, experimental pathologist and environmental toxicologist" with extensive experience in chemical carcinogenesis. He said he had worked with asbestos for three and a half years, was a recipient of an EPA grant and was "certified" to measure asbestos. He said he considered himself "a scientist first and a clinician second." (Note: This claim is absurd since Croft is not a physician. As a matter of fact, Staff was told by Klingberg after the meeting that a local cancer specialist was outraged at some of Croft's medical explanations.)

Croft said he was retained "to answer some of the resounding questions about the deterioration of A/C pipe and its potential health effects on the citizens." He considered it a complex environmental question which could take forty to fifty years before ill effects are known. He reviewed the general approach to his studies.

Croft reported asbestos levels in Weston drinking water were as high as 46 mfl and low as 0.5-1.0 mfl. He said "a significant number are above 10 mfl." Sixty samples have been taken to date and the reported results presumably are those of Croft. (Note: AACPP Counsel learned that Croft submitted water samples to Walter S. McCrone Associates for analysis. These may be to double check his results.) Croft claimed there is no asbestos in the wells or ground water in the area. Expert soils engineers and hydrogeologists also concluded, according to Croft, there is no asbestos in the soils or bedrock in the area. No documentation was presented to support this claim and in fact it appears to contradict the DNR press release (Attachment 2).

Croft also reported on airborne asbestos levels in the community. His measurements showed an 8 hour time weighted average (TWA) exposure of 3.0 asbestos fibers per cubic centimeter of air were "coming off used A/C pipe in a storage yard" and 1 to 5 fibers/cc levels were present in homes using water conveyed by A/C pipe. In contrast, he stated, homes not using water conveyed by A/C pipe have no fibers in them. Croft characterized this as a "resounding association and a significant finding."

As far as health effects of exposure are concerned, Croft stated he planned to start in the next few weeks to assess the impact of A/C pipe on the health of the community.

Croft then reported on "what Mother Nature is telling us about asbestos in drinking water." He said his research on mesothelioma in dairy calves revealed asbestos fibers present in the tumors and in the calves' abdominal fluid. Since Croft claimed to find asbestos fibers in their drinking water, he concluded that asbestos was the causative agent. This research has not been published. Croft also said "there are 13 cases of mesothelioma in children." He did not say whether those children lived in the Weston or Wausau-Merrill area.

Croft then gave a slide presentation covering:

- the Kanarek study of asbestos in drinking water and cancer incidence in the San Francisco Bay area. Croft said the study showed a "significant increase in disease in exposed populations."
- the 8,000 law suits against J-M.
- asbestos fibers and the transmission electron microscope.
- the Cook study on asbestos fibers in human urine.
- medical textbook pictures of the lung and how asbestos caused asbestosis and mesothelioma. Croft claimed workers exposed to asbestos demonstrate asbestos in all body sites.
- Selikoff's finding of increased gastrointestinal and kidney cancer in workers exposed to asbestos. Also claimed that asbestos exposures resulted in increased brain cancer and that Kanarek demonstrated increases in pancreatic cancer.

Croft showed slides of A/C pipe from the Weston system. The pictures were taken on September 23, 1981 and appeared to show internal softening to a depth of approximately 1/8 of an inch. A picture was shown of a pipe interior scraped to demonstrate softening. Also shown was a large bag of asbestos fiber and cement which had been "poly-pigged" from a section of A/C pipe during the EPA rehabilitation studies. Croft also said the outside of the A/C pipe was softening in a locale where the pipe was buried in water. A picture was shown of a profiled end of a piece of A/C pipe. It appeared to show some corrosive attack.

Finally, Croft showed a slide of a table excerpted from the EPA Water Quality Criteria for Asbestos. The data showed cancers expected to occur from exposures to 3,000, 30,000 and 300,000 fibers per liter. He concluded the asbestos levels in Weston constituted a "very high risk."

The Kanarek-Conforti study of asbestos release in non-aggressive waters was used to support his claim that the pipe will corrode regardless of water treatment. The importance of the Kanarek findings was repeated.

As to the significance of the data, Croft said "to have zero risks, we must have zero exposure." There are no standards or criteria established to date for asbestos in drinking water, he said. The alleged finding of 1 to 5 fibers/cc in the air of homes constituted, in his judgment, a serious risk. He said that 10% of the people exposed to the current OSHA standard of 2.0 fibers/cc would die of cancer. He said it was desirable to have ten times less exposure in homes due to the susceptibility of women and children to cancer. He said the asbestos and water and asbestos in air were a community problem because "wherever the water goes so goes the asbestos." He said "three generations of people from Weston were exposed and the effects will be permanent."

As to what corrective measures should be taken, Croft recommended that citizens, particularly children, reduce exposure to asbestos in air and water. He also recommended minimizing exposure to cigarette smoke and the consuming of Vitamin A and all other vitamins.

Presentation by Richard Weber, Esq. (Town Attorney)

Weber said the Town Board had taken an open view about the legal aspects of the Town's problem. He said much data was in and much more had to be gathered before the decision was made to litigate. He was concerned about the fibers in air and the fibers in water. He said that it would be "inappropriate to divulge to legal theories on which we will proceed." He said the courts in Wisconsin were liberal in granting relief to parties where damages were shown to occur or likely to occur. He cited the large number of law suits with asbestos manufacturers. He said he would be less than candid if he did not state that litigation would be a "new experiment." He is not aware of any cases involving asbestos in drinking water. Importantly, he said if the Town goes forward with litigation, it would attempt to correlate the waterborne exposures with the hazards of asbestos in air. He concluded that no decision had been made to proceed, that the Board was reviewing the Croft data and a decision would be made sometime next year.

Presentation by Archie (Skip) Becher, P.E.

Becher is a principal in the Town's consulting engineering firm, Becher-Hoppe. He reported on the feasibility and costs of removal and replacement of the existing A/C mains. There are 107,738 feet of 6 to 12 inch A/C pipe in the system. The pressure class was not given. Assuming replacement with ductile iron pipe, minimal service disruption and current pipe prices, Becher estimated the cost to be \$2.0 million for removing the A/C pipe and \$4.4 million for replacing it with ductile iron. He estimated 2 1/2 - 3 months to complete the job, predicated on an early Spring decision.

Presentation by Jack Allen (Town Chairman)

Picking up where Becher left off, Allen said a bond would have to be floated to pay for the project. Assuming an 11% interest rate, 10 year payback period, the costs would be \$744,000 per year. This would require a special assessment of \$350 per year for ten years for all water customers. This figure produced whistles and groans from the audience. There was no mention in either Becher's or Allen's presentations of any other alternative other than removing the A/C pipe.

The floor was then opened for questions (Attachment 4).

After the questions waned, someone from the audience moved that a straw vote be taken. A smiling Allen and Becher counted only six "no" votes, all others being in favor of replacing the pipe.

Media Coverage of Meeting

Staff was approached by television reporter Todd Weiler (WAOW, Channel 9) to give industry's response to the meeting. The interview went as follows:

Weiler: Mr. Welch, what is the industry's reaction to the meeting tonight and to Dr. Croft's claims?

Welch: The industry's position is that the scientific evidence stands on face value. There is no cause and effect relationship between ingested asbestos and any disease. Ten epidemiology studies and nine animal feeding studies have shown this to be the case.

Weiler: What about the two studies that Mr. Weber mentioned showing ingested asbestos causes disease?

Welch: Mr. Weber is incorrect, there has only been one study (Kanarek) which was published twice. The study also was never replicated. Replication is one of the basic tenets of the scientific method.

Weiler: Mr. Welch, would you drink the water in Weston?

Welch: Yes, I would not hesitate for a second.

Weiler: Would you buy a home in Weston?

Welch: Yes I would. It is a lovely community.

The meeting was given broadcast coverage on the 10:00 p.m. news, December 16, 1981 and again on December 17. Staff's interview aired on the latter program.

The Daily Herald also ran a story (Attachment 5) in which Staff expressed its concerns about the form and content of the meeting, especially Croft's claims.

Staff Analysis of Meeting

This was a well orchestrated, tightly controlled event whose result was fully planned weeks in advance. Croft's presentation was designed to instill great fears about the health hazards of waterborne and airborne asbestos. Given the half-truths, falsehoods and inflammatory nature of Croft's statements, no other result could reasonably be expected. The prevailing mood after Croft's presentation was one of genuine concern. The audience was convinced that the health hazards of A/C pipe were not potential but real and imminent.

Becher-Hoppe's role was greatly restricted. In not presenting alternatives to pipe removal, Becher side-stepped the only issue which might represent any opposition - the \$6.4 million cost. The avoidance of any mention of DNR's or EPA's support or opposition to this action also is notable.

Becher-Hoppe undoubtedly realizes its potential liability in this matter and has chosen to follow the path of least resistance. Not only did they originally approve the use of A/C pipe, but as the Town's consultant failed to recommend appropriate treatment processes to stabilize the highly corrosive water. For that matter, the Town Water

Board also may be responsible for the alleged deterioration, which does not appear to be significant and certainly is correctable at much less cost than pipe replacement.

Follow Up with Wisconsin Department of Natural Resources

On the morning of December 17, 1981, Staff contacted Bob Baumeister and gave him a full briefing on the meeting. Baumeister could not believe some of Croft's statements. When asked, he said he did not know how DNR might handle the situation.

Staff advised Baumeister that it had been contacted by the Wisconsin Legislature to provide information on the safety of A/C pipe. Baumeister reported that Dr. Croft was working actively with the legislator for the Wausau area, Walter Chilson. Croft told Chilson that "DNR is not doing its job" with regards to asbestos in drinking water. This has resulted in some political pressure on Baumeister. Moreover, Baumeister believes that it is likely that Croft may push for introduction of legislation to ban A/C pipe in Wisconsin.

AACPP Action Plan

Douglas Klingberg of the law firm Terwilliger, Wakeen, Piehler, Conway and Klingberg has been retained to monitor future developments and provide input on the feasibility of potential action plans. He reports (Attachment 6) that recent conversations with Weber suggest "a lawsuit is all but certain."

There are two distinct but interrelated problems: (1) the removal of the existing A/C pipe system and the adverse publicity, real or perceived, which may result in the marketplace from such action, (2) the possibility of a lawsuit involving two or more A/C pipe manufacturers. Assuming that AACPP is not likely to be a named defendant in litigation to recover expenses of pipe removal and replacement, only options relevant to mitigating potential adverse publicity are discussed. AACPP Counsel will outline what legal options, if any, exist for AACPP participation in pending litigation (see Executive Committee meeting minutes, September 1, 1981).

Option 1: Take No Public Relations or Legal Action

- | | |
|----------------|--|
| Advantages: | <ul style="list-style-type: none">(1) No financial or Staff resources required(2) Industry does not release data which might be valuable in future legal defense.(3) Town gets what it wants. |
| Disadvantages: | <ul style="list-style-type: none">(1) Possibility of "domino effect" to other Wisconsin utilities using A/C pipe; resultant public relations problems and other legal actions.(2) Possible "domino" to other states.(3) Industry's integrity may be questioned i.e. why is not strongly defending the safety of its product? |

Option 2: Take Limited Public Relations Action

Another option would be to prepare a full-page "letter to the people of Weston" and publish it in the Daily Herald. The letter would attack Croft's claims, the roles of Water Board and consulting engineer in creating the alleged problem, evidence supporting industry's position, and perhaps appeal for more reasonable corrective measures such as pipe rehabilitation or

water treatment. This approach would have maximum impact if DNR plans to take a position against the Town's action.

- Advantages:
- (1) Industry's position is expressed without editing.
 - (2) May raise questions about Croft's claims, Board's actions and need for replacing system; may put Town Board in defensive posture.
 - (3) May result in citizens request for another "informational meeting," perhaps with DNR and/or industry representation.
 - (4) Industry perceived as defending and standing behind product; may be important outside Weston.
 - (5) May focus public attention on options to pipe removal.
- Disadvantages:
- (1) Ideally, data (asbestos levels in air and water) are required to rebutt Croft's allegations.
 - (2) Commitment of financial and Staff resources required.
 - (3) Lack of credibility by public; industry has a vested interest so its views will be received skeptically. This could be overcome only if DNR took a position similar to the industry position.
 - (4) Industry might release information which could weaken its defense in future litigation.

Option 3: Attempt to Stimulate Investigatory Reporting

It may be possible to work with the Daily Herald and encourage an in depth series of news articles on the alleged problem.

- Advantages:
- (1) The shallowness of Croft's expertise, the roles of Becher-Hoppe and the Water Board might be brought to light.
 - (2) Maximum credibility by and impact on the public.
 - (3) Maximum potential for modifying or reversing proposed actions, if series is powerful enough and uncovers wrongdoing or inaccuracies in Croft's measurements.
- Disadvantages:
- (1) Some data (preferably DNR) required to rebutt Croft's measurements.
 - (2) Unknown probability of success in getting Daily Herald interested.
 - (3) Commitment of Staff resources.

Option 4: Attempt to Organize a "No" Vote on the Pipe Removal Referendum

This option is predicated on there being a legal need for the Town to approve the \$6.4 million removal/replacement by a referendum. Attorney Klingberg does not believe that this is the case but his firm is researching the matter and will advise accordingly. Winner/Wagner & Associates, Inc., AACPP special counsel in California, specializes in managing "no" votes on ballot measures. Their largest client is Consolidated Edison of New York (electrical utility).

- Advantages:
- (1) Uses Weston citizens who may be opposed to removal for financial reasons or because they believe industry

- or DNR position.
- (2) Places a heavier burden on Town Board and its consultants to justify the proposed actions.
- (3) May provide a number of public or media forums to express industry's position or for DNR and EPA to express positions, if any.

- Disadvantages:
- (1) Substantial cost and commitment of Staff and consultant resources.
 - (2) Probability of success unknown.

Option 5: Organize Legal Action

It might be possible to organize citizens opposed to the proposed action to file a complaint against the Town Board. The action might restrain the Board from removing the pipe on the grounds that it is unreasonable or an abuse of discretion. The citizens would rely on industry legal support and scientific expertise to move forward with its case.

- Advantages:
- (1) Stops Town Board from removing pipe.
 - (2) Board, its consultants and evidence not protected by work product theory would be subject to rules of discovery, deposition, etc.

- Disadvantages:
- (1) Commitment of substantial financial (special counsel) and Staff resources.
 - (2) Probability of organizing such a citizens group (only one person is needed) is unknown.
 - (3) Probability of prevailing is unknown.

Since all but Option 1 require a substantial commitment of resources, action will be taken by the Executive Committee on January 20-21, 1982.

If you have any questions or recommendations, please do not hesitate to call.

JFW/ajb

Enclosure

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Weston case may get wide attention

By DON OAKLAND
Herald Staff

The town of Weston may become the first municipality in the United States to sue manufacturers of asbestos-cement pipe because of asbestos fibers entering the town's drinking water.

The town contends the presence of the asbestos, a known cancer-causing agent, is an unreasonable threat to public health.

Asbestos — Part I

Pipe manufacturers argue the amount of fiber, estimated as low as one part per billion parts water, poses no hazard.

If the controversy finds its way into the courtroom, it will likely draw a national audience. One researcher estimates 10 million utility customers in the country might find themselves in situations similar to Weston's.

"We are going to have to demonstrate that water containing asbestos fibers of quantities that we have them in Weston are unreasonably dangerous," explained Richard Weber, attorney for the town of Weston.

"There is some law, quite well established in the federal courts, that has said that asbestos products are inherently dangerous as a matter of law," he said.

However, those cases involved the inhalation of asbestos fibers and a link to certain types of cancer. It is believed that if the Weston case goes to court, it will be the first to argue that ingestion of fiber is as dangerous.

To date no studies have shown a conclusive link between the ingestion of asbestos fibers and cancer formation. However, Weston officials say they can't wait for their concerns to be confirmed by research.

"We can't wait until somebody develops some sort of cancerous tumor, we feel we have a duty to do something about it. That's the attitude of the Town Board," Weber said.

In March the board hired Dr. William Croft, an oncologist at the University of Wisconsin-Madison, to provide technical assistance to Weber as he develops the town's case.

"Exposure to a carcinogen is exposure. Whether you drink in the fibers or inhale them, you still are going to be exposing that person to it," Croft said.

"To have zero risk, you must have zero exposure," he added.

Weston is not alone in having asbestos fibers in its drinking water.

The U.S. Environmental Protection Agency surveyed water utilities in 408 cities in 47 states and found asbestos fiber concentrations of more than one million fibers per liter in 18 percent of the samples.

Sampling done in Weston's has found average fiber levels of about two million per liter. In some samples, counts of 150 million fibers per liter have been found.

There is about 300,000 miles of asbestos-cement pipe in use in the United States and about two million miles in use worldwide, according to the A-C Pipe Producers Association, Arlington, Va.

One EPA report estimates that 16 percent of the asbestos-cement pipe in use in the United States could be susceptible to the type of deterioration Weston is experiencing. The EPA estimates that would affect 10 million persons.

Weston purchased its asbestos-cement pipe between 1964 and 1971, according to Richard Schneider, former director of public works for Weston.

It was purchased because it was less expensive than cast iron pipe, according to Vilas Machmuller, who was a town supervisor at the time the pipe was purchased.

In May 1980, public works crews discovered that a portion of one watermain was soft. Schneider figured the pipe was deteriorating and releasing asbestos fiber into the water.

Zimpro Inc., Rothschild, later confirmed the presence of fibers.

In June 1980, the town entered into an agreement with the EPA which led to a \$75,000 study of the Weston situation. Field studies to determine the amount of pipe deterioration and fiber content in the water were done last fall. A report on the project is expected in the next three months.

At the direction of Weber and Croft, the town recently dug two test wells to determine if asbestos is occurring naturally in the groundwater.

The town must prove it has no asbestos from natural sources in order to show that the fiber is coming from the pipe, Croft explained.

Also, Croft is taking samples.

See WESTON, Page 1, Column 1.



Testing for asbestos

Dr. William Croft, (right) a University of Wisconsin-Madison oncologist, takes a water sample from a special well dug off Mesker Street in the town of Weston. Looking on is Dick Schneider, who at the time was director of public works for the town. Two special wells were dug to determine if asbestos fiber is present in the groundwater. If asbestos isn't present, then Croft may prove that asbestos in the town's drinking water is coming from the asbestos-cement watermain. The presence of fibers in water is determined by looking at samples through an electron microscope.

—Herald photo by Bob Radwan

Weston asbestos case unique

(From Page 1)

from the watermain to obtain precise fiber counts.

Preparation of the case is expected to be completed by fall, Webersaid.

If the suit is filed, it will be a multi-million-dollar claim.

To replace the 23 miles of asbestos-cement pipe in the town would cost \$10 million according to one estimate, Schneider said.

"It's physically impossible to get \$10 million. Even if it was avail-

able, I don't think we'd have enough bonding power," Schneider said.

To obtain those funds, the town is considering a product liability suit against Johns-Manville Sales Corp., Denver, Col., and Flintkote Co., New Rochelle Park, N.J.

(In Tuesday's article, the two asbestos-cement manufacturers involved react to the possible suit. The third article will examine two asbestos studies which appear to contradict each other.)

36 Pages
25 Cents

pipe issue

against the manufacturers of the asbestos-cement water pipe found in the town.

An estimated 23 miles of such pipe is present in the town's watermain system.

Town officials say the pipe must be replaced because of the health hazard and want the manufacturers to pay for the installation of new mains.

The manufacturers claim there is no proven health hazard and there is no structural damage to the pipe.

At stake in the court battle that appears likely is whether the town will have to replace the pipe, at an estimated cost to town taxpayers of \$10 million, or whether the manufacturer will foot the bill.

The crucial point in the case rests on whether the existing pipe does present a health hazard.

Manufacturers say West

By DON OAKLAND
Herald Staff

The possibility of the town of Weston filing a product liability suit against two manufacturers of asbestos-cement pipe brought denials from the firms that the pipes posed a health hazard.

Asbestos — Part 2

Weston is considering the suit in order to force the companies to replace the pipe because the town believes the pipe is a public health hazard.

Town officials say the pipe is releasing fibers of asbestos, a known cancer causing substance, into the drinking water.

The target of Weston's suit would

be Johns-Manville Sales Corp., Denver, Colo., and Flintkote Co., New Rochelle Park, N.J., the two companies which sold the town asbestos-cement pipe between 1968 and 1971.

In a letter to Weston, H.L. Olson, manager of environmental and engineering development for Johns-Manville, wrote:

"In view of the fact that the pipe has not been significantly damaged structurally after 10 years of exposure to a very aggressive water environment and that further exposure is not expected due to your water treatment program to reduce the aggressiveness of the water; we are at a loss to understand why you believe the lines should be replaced."

A Flintkote official was equally surprised.

"We haven't got enough informa-

tion to judge what the problem said J.C. Schmitt, product and safety manager for Flintkote when the Herald recently contacted him by phone.

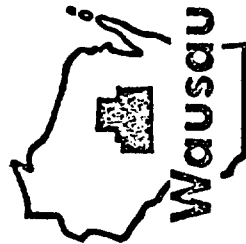
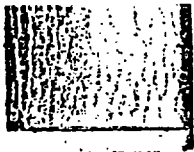
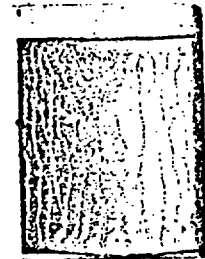
He said it is unclear how much any, Flintkote pipe is involved in that pipe is the source of the asbestos, Schmitt explained.

In a phone conversation with Herald, Olson staunchly defended asbestos-cement pipe and disputed any contention that there might be any health risks.

"If this is looked at rationally there is no reason to get excited," he said.

No research study has shown link between ingestion of asbestos and cancer, he said.

Dr. Paul Kolin, senior vice president of health safety and environ-



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4 Sections

Wausau-Merrill, Wis. — Wednesday, June 24, 1981

Studies have failed to resolve asbestos

DON OAKLAND

Aid Staff
The controversy over the health effects of asbestos fiber in drinking water, two studies are often quoted on both sides in defense of their positions.

Part in series

The involves a study of cancer incidence in San Francisco, an area with a high level of naturally occurring asbestos which is leaching into drinking water supplies. The other involves a study in Connecticut of cancer incidence in communities served by asbestos-cement pipe and where fiber has been found in drinking water. The results of these studies and criticism which followed illus-

trate the difficulty in proving whether asbestos fiber in drinking water and ingested by man poses a cancer risk.

In 1978 Marty Kanarek, an assistant professor of preventative medicine at the University of Wisconsin-Madison, compared the amount of fiber in drinking water in and around San Francisco with the incidence of cancer. His study included a survey of several population groups between the years 1969 and 1974.

The study showed a statistically significant association between the level of fiber in the water and various cancers of the digestive tract.

Fiber levels in the drinking water ranged from undetectable to 180 million fibers per liter (Weston has on the average two million fibers per liter).

A recent review of Kanarek's study indicates he might have been too conservative in his fiber counts, according to William Croft, a University of Wisconsin-Madison oncologist, who is serving as a consultant in the Weston case.

"In other words, they (the reviewers) said that it takes less fibers per liter in water (to show significant incidences of cancer) than what was actually reported," Croft said.

Industry spokesmen have criticized the Kanarek study as inconclusive because it didn't take into account population density and other factors related to the incidence of cancer.

In the May 1981 issue of Water Engineering and Management, Robert Welch, with the A-C Pipe Manufacturers Association, wrote:

"A peer review of the San Francisco study concluded that beyond

the lack of control for ethnicity, occupational exposure to asbestos, dietary or smoking habits, alcohol consumption or exposure to other potential carcinogens in drinking water, the study did not adjust for population density. People who live in more crowded areas where the population density is higher consistently manifest higher cancer rates."

Industry officials like Welch point to a study done in Connecticut which found no link between the presence of asbestos fiber in drinking water and cancer risk.

In the Connecticut study, done by J. Wister Meigs, a professor of epidemiology at Yale University, areas which had asbestos fibers in the drinking water were compared with the addresses of victims of cancer listed on the state's tumor registry,

which dates back to 1935. The researcher found no significant difference between areas with asbestos and those who live in pipe.

Croft contends that the researchers were wrong in using a comparison.

"If you realize that the rate of colon cancer in Connecticut is extremely high, then if you find a rate of colon cancer with something that you're not going to find in Connecticut," Croft argues.

"They used the control," Croft said. "It is under those points that the town itself as it grows

12/1/81

Wausau

Weston sets asbestos meeting for Dec. 16

By DON OAKLAND
Herald Staff

A public meeting on the asbestos problem in the town of Weston will be held at 7 p.m. Wednesday, Dec. 16, at the D.C. Everest High School auditorium.

Jack Allen, town chairman, said Monday that the purpose of the meeting is to give an update on research associated with a possible lawsuit against the manufacturers of asbestos-cement watermain used in Weston.

Portions of some watermain in the town have deteriorated, releasing asbestos fibers into the drinking water.

Town officials feel the presence of the fibers poses a health hazard. Asbestos is a known cancer causing agent; however, whether the presence of asbestos fiber in drinking water is a health hazard has not been conclusively answered.

In March the water utility hired William Croft, a University of Wisconsin-Madison oncologist, to research the extent of the asbestos problem in the town.

The information will be used by Town Attorney Richard Weber to determine if the town has a case against the pipe manufacturers.

Information regarding the cost of replacing the pipe will be discussed at the meeting also, Allen said.

Announcement of the meeting date was made at a meeting of the town water utility board.

Lastest figures show the utility has been billed \$101,630 for the research done.

Those attending the meeting will be asked to vote on how the town should proceed, Allen said.

The board had considered a referendum among utility customers, but abandoned that idea, feeling it would be too difficult to conduct such a vote at the meeting, Allen said.

"You have enough reason to look into this very, very closely," Dr. David Jenkins, a specialist in internal medicine in Wausau, told the board Monday.

Jenkins, 2005 Hemlock St., Schofield, whose family is served by the water utility, said he has taken a personal interest in the asbestos question. He said he is acquiring medical reports related to asbestos research.

He said one report showed a positive relation between the amount of asbestos fiber in the drinking water and the occurrence of certain types of cancer, he said.

Although one study is insufficient to make a case against asbestos fiber in drinking water, it does raise enough concern to warrant further study, Jenkins said.

In Weston

Meet should be open

The Weston Town Board last week scheduled a closed meeting to discuss with William Croft, a University of Wisconsin-Madison oncologist, and Richard Weber, town attorney, the cost of their services related to a possible lawsuit against the manufacturers of asbestos-cement pipe used in Weston.

At the last minute that meeting was canceled and then postponed to Thursday, Nov. 12.

We believe the Town Board was wrong in closing the scheduled meeting. Thursday night's meeting should be open.

The public has a right to know how its money is being spent. In Weston this is particularly critical because the town's water utility is considering placing a special charge on the tax bill of water customers in 1982 to pay for this research, among other items.

In 1982 the water utility faces a \$204,447 deficit, according to figures released last week by Agnes Krause, town clerk. Paying that deficit would require a special charge of more than \$100 to each of the 1,970 water utility customers.

That would be in addition to the 54 percent increase in Weston water rates which went into effect last summer.

According to latest estimates, the town has been billed \$101,630 for the services of Croft and Weber.

For that money, the town has seen few results to date. Also, town officials have received little indication of how long this research will continue, when a lawsuit will be filed and what additional costs are likely to be incurred.

The purpose of the meeting is to obtain answers to those questions from Croft and Weber. We think the public should be allowed to hear the answers.

We can appreciate that some of what may be discussed would be information that the town would use in its case against the manufacturers of the asbestos-cement pipe.

But we think the town could separate the legal issues from the cost issues. Those items of legal strategy, which if made public could give the manufacturers of asbestos-cement pipe an unfair advantage in court, could be discussed in closed session.

Those items dealing with the cost of the research, which the public has a right to know, could be discussed in open session.

The state open meeting law, while making provision for municipal officials to discuss legal strategy with their attorneys in closed session, makes no provision for closed door meetings to discuss spending public funds for consulting services related to possible litigation.

Weston plans town meeting on asbestos

DON OAKLAND
Herald Staff

A special Weston town meeting is planned for the first week of December to discuss the town's asbestos-cement pipe problem and a possible lawsuit against manufacturers of that pipe.

The time and date of the meeting will be set when town officials can obtain a facility large enough to accommodate the large turnout expected, the officials said Monday night.

The Weston Water Utility is also considering whether to hold a referendum among customers of the utility on whether to continue spending money on asbestos related projects.

"In December we'll either abandon it or proceed," said Jack Allen, town chairman.

From conversations with town residents, Allen said he suspects many will want the town to begin removing the pipe.

"When we have this meeting, they are going to tell us to start getting that stuff out of the ground," Allen predicted.

He said town officials hope to have enough data to give answers on whether the pipe is a health hazard, whether the town should pursue a lawsuit and what future costs might be incurred.

In the spring of 1980 town crews discovered that portions of the asbestos-cement watermain were deteriorating. Town officials feared asbestos fibers were being released into the water supply.

Asbestos is a known cancer causing agent. However, whether the presence of asbestos fiber in drinking water is a health hazard has not been conclusively answered.

In June 1980 the town entered into a contract with the U.S. Environmental Protection Agency to study the problem. The EPA provided \$75,000 for that study.

At a meeting Monday night the utility board approved a contract with Becher-Hoppe Engineers, Inc., Schofield, to complete a report of that study for a sum not to exceed \$10,850.

Initially, the report was to have been made by Richard Schneider, the former director of public works, who resigned in May of this year. No one has been hired to replace him as director.

In March of 1981 the board hired a University of Wisconsin-Madison oncologist, William Croft, to conduct research related to a possible lawsuit against manufacturers of that pipe. The legal research would be conducted by Town Attorney Richard Weber, the board decided.

To date the utility has been billed \$101,630 for services connected to the lawsuit research. Weber's fees have thus far amounted to \$3,205, and Croft has submitted bills for \$51,007. The remainder of the money is owed other firms for work connected with the research.

There are no grants available to offset that cost, Allen said.

Weston to freeze-test pipes

By JILL FREDDEL
Herald Intern

The town of Weston has approved another test to try and improve its lawsuit case against the two companies that sold the town asbestos-cement pipe between 1968 and 1971.

At a meeting of the Weston Water Utility Board on Monday, members approved the proposal of Soil Testing Services of Wisconsin, Inc., Green Bay, to test the asbestos-cement pipe under freezing and thawing conditions. The tests will try to simulate the conditions present in Weston.

Town chairman Jack Allen said few tests of this nature have been done on asbestos-cement pipe.

"We have to be our own guinea pigs," he said.

The estimated cost of the tests would be \$17,000-\$19,500.

The purpose of the tests is to characterize strength and durability properties of the pipe. The study will attempt to identify initial strength of the material, changes, if any, in pipe strength associated with pipe saturation condition, length of service and environmental stress conditions.

Allen said any test that can provide the town with a better case against the suppliers of the pipe — Johns-Manville Sales Corp. and Flintkote Co. — is a plus.

"Those people are not going to roll over and play dead because Weston decided to sue them," he said.

Allen said town attorney Richard Weber feels Weston has a "good case"

against the companies, but "we have to nail it down."

Properties of the proposed rehabilitation liner will also be evaluated. (The rehabilitation procedure would consist of coating the inside of the pipe with cement grout.)

The tests will make use of samples of newly manufactured pipe, used pipe extracted from the water distribution system in Weston and pipe lined according to the proposed rehabilitation procedure. The pipe will be provided by the town.

Following the tests, an engineering report will be prepared.

In other action, a meeting was set for July 21 at 6:30 p.m. at the Municipal Center to discuss the financial situation of the water utility.

Cost of Weston asbestos fight keeps escalating

By DON OAKLAND
Herald Staff

Bills totalling \$35,585 from a consultant working on asbestos-cement pipe research has Weston officials upset.

That bill and continued expenses related to a possible lawsuit against manufacturers of the asbestos-cement watermain have caused members of the Weston Water Utility Board to once again consider placing a special charge on the 1982 tax bills of water customers.

According to a budget presented by Agnes Krause, town clerk, the utility will face a \$168,862 deficit in 1982 unless rates are increased.

Added to that would be the consultant's latest bill, which would place the total deficit at \$204,447.

In response to that situation, the board made two moves Monday night.

They asked Jack Allen, town chairman, to arrange a special meeting Thursday night with the consultant, William Croft, an oncologist with the University of Wisconsin-Madison.

They also decided to hold a special town meeting in the near future to give Weston residents an update on the asbestos-cement pipe problem and the financial plight of the utility.

The board indicated it would not act on any special water charge until after that special town meeting.

Costs of the research for the possible lawsuit have risen steadily. Prior to the \$35,585 bill submitted Monday, the utility had spent \$66,045 for services of Croft and Richard Weber, town attorney, according to a report issued by Krause in October.

Of that \$66,045, the bill from Croft came to \$49,495, according to Krause, and the balance was due Weber and also included some laboratory fees.

"It's a never ending, expensive deal," Allen said of the lawsuit research.

He said he has been unable to obtain from Croft

an indication of when his research will be done and what future expenses will be.

Town officials have received few results from Croft's research thus far, Allen said, although Croft has assured the Town Board that results of his tests will be forthcoming.

"We want to see them (test results) in black and white and let us draw our own conclusions," Allen said.

It is important that those results be obtained prior to the special town meeting, said Supervisor John Neitzke.

"You know how silly we'd look if we and Dr. Croft couldn't give the people any facts," Neitzke said.

The utility board is also looking at a \$10,850 expenditure proposed by Becher-Hoppe Engineers, Inc., Schofield, to finish the final report of the U.S. Environmental Protection Agency asbestos-cement study.

For that expense the town will not receive outside aid.

At the Town Board meeting, which immediately followed the utility board meeting, the board took the following actions:

- Turned down a request from Rothschild to participate in the construction of a storm sewer along Volkman Street to afford drainage to Timberlane Addition, which is in Rothschild.

- Agreed to pay for the legal work to exchange deeds with James Schroeder, 4004 E. Everest Ave., Schofield, for a portion of the land he owns on JaMar Street which was inadvertently located on the street right of way.

- Ratified a mutual police protection agreement with Schofield and Rothschild which will allow officers to make arrests in any of the three communities. The agreement, which had been previously ratified by Schofield and Rothschild, is now in effect.

ATTACHMENT 2

STATE OF WISCONSIN/DEPARTMENT OF NATURAL RESOURCES
North Central District Headquarters
Box 818
Rhinelander, Wisconsin 54501

CONTACT Tom Bashaw District Water Quality Supervisor (715)362-7616
Bill Dobbins, Environmental Engineer/Water Supply (715)362-7616

FOR IMMEDIATE RELEASE

Friday, December 11, 1981

Asbestos Fibers Occur Naturally at Times in Water Supplies

RHINELANDER, WI -- Recent water quality testing by the DNR of public water supply wells statewide has shown low level amounts of asbestos fibers in 10 of 17 wells sampled, Bill Dobbins, Water Supply Engineer, said.

"These naturally occurring asbestos fibers in drinking water have also been found in several western states and Canada," Dobbins said. "Because of this initial finding of asbestos in some Wisconsin groundwater, the DNR is expanding its study to find out the distribution of the fibers in the groundwaters of the state."

Several public water supply wells in the Marathon County area are scheduled for asbestos sampling during the next few weeks.

Dr. Henry Anderson of the Bureau of Community Health and Prevention of the Wisconsin Department of Health and Social Services has stated that there is very little evidence of a correlation between asbestos fibers ingested through water and any carcinogenic effect.

"It's tough to get any asbestos fiber dose and response effect evidence of harm because the effect from individual to individual is different," Dr. Anderson said. "Obviously the lower the dosage of fibers in water, the less likely there will be a result so it's prudent to keep levels as low as possible."

Asbestos fibers were discovered in municipal drinking water supplies in the Town of Weston. It was believed to have been from corrosive water leaching out the calcium in asbestos cement water supply piping.

(Over)

"The DMR has reports of residents putting in private wells to avoid drinking water from municipal supplies containing asbestos fibers " Dobbins said. "This may not lead to asbestos free water since naturally occurring asbestos in groundwater might be fairly common."

Connections to both a municipal water supply and a private well is a violation of the state plumbing code. This also presents a health hazard to the community if inside water from an unprotected private well was to enter the public supply system, Dobbins noted. This is commonly referred to as a "cross-connection".

A number of research projects to gather information on the health aspects of asbestos fibers and of the protection and rehabilitation of asbestos cement water delivery pipes are being conducted across the country. The Town of Weston asbestos pipe study is expected to be completed by the Spring 1982.

The U.S. EPA has taken no steps to initiate a drinking water standard for asbestos fiber.

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Wausau Daily Herald, December 16, 1981

Weston asbestos meet is tonight

By DON OAKLAND
Herald Staff

How serious is the asbestos problem in the town of Weston?

Does the town have a case to sue manufacturers of the asbestos-cement pipe for the cost of replacing the pipe?

What will it cost to replace the pipe?

These questions will be addressed at a public meeting to be held at 7 p.m. tonight in the auditorium of the D.C. Everest High School.

At the conclusion of the meeting, a straw vote will be taken on what course of action town officials should pursue, according to Jack Allen, town chairman.

The meeting will begin with an overview of the situation by Allen.

The problem with asbestos-cement pipe was discovered in the spring of 1980 by town crews who noticed portions of the watermain were deteriorating. Town officials feared asbestos fibers were being released into the water.

Asbestos is a known cancer-causing agent. Whether the presence of asbestos

fiber in drinking water is a health hazard has not been conclusively answered.

In March 1981, the Town Board hired William Croft, a University of Wisconsin-Madison cancer researcher, to conduct a study of the watermain in connection with a possible lawsuit against the manufacturers.

Croft will be at the meeting to discuss his findings.

Richard Weber, town attorney, will discuss the legal implications of the study and the potential for a lawsuit.

The cost of hiring Croft and Weber will also be discussed. To date the town has been billed \$101,630 by them and others involved in the study. Town officials say there are no federal or state grants available to offset the research cost.

Archie Becher Jr., president of Becher-Hoppe Engineers, Inc. Schofield, will present a report on the cost of replacing the pipe.

He estimates the cost of installing new mains and removing the old mains at \$6.4 million.

In attendance at the meeting will be a representative from the A/C Pipe Producers Association, Arlington, Va.

In a related matter, the state Department of Natural Resources said Friday that asbestos fibers have been found in 10 of 17 public wells sampled statewide.

Fiber has been found in some samples of groundwater in Marathon County, according to Tom Bashaw, water quality supervisor for the Rhinelander DNR office.

"Because of this initial finding of asbestos in some Wisconsin groundwater, the DNR is expanding its study to find out the distribution of the fibers in the groundwaters of the state," said Bill Dobbins, environmental engineer-water supply at the Rhinelander DNR office.

"The DNR has reports of residents putting in private wells to avoid drinking water from municipal supplies containing asbestos fibers. This may not lead to asbestos free water since naturally occurring asbestos in groundwater might be fairly common," Dobbins said.

Producers' spokesman defends pipe

By DON OAKLAND
Herald Staff

"There is no cause and effect relationship between the ingestion of asbestos (in drinking water) and disease," said John Welch, director of public affairs for the A/C Pipe Producers Association, Arlington, Va.

Welch was in Wausau today to attend the public meeting on the Weston asbestos problem to be held tonight. He said he was attending the meeting as an observer and to give the industry's viewpoint if asked.

The A/C Pipe Producers Association is a trade group representing the three producers of asbestos cement pipe in the United States, pipe manufacturers in Canada and 16 pipe companies worldwide.

If the Weston case goes to court, it would be the first case in the United States to address the question of potential health hazards associated with asbestos-cement pipe, Welch said.

"To the best of my knowledge, this is the second time this concern has pro-

ceeded to the point of litigation," he said.

The other case occurred in Crivitz, Wis., where the question of health was not addressed because the judge dismissed the suit by ruling no significant amount of asbestos fiber existed in the Crivitz system, Welch explained.

The position of the industry that asbestos-cement pipe poses no health risk has grown stronger in light of recent studies, Welch said.

"We feel even stronger about the product then we did a year ago," he said.

A study of the Puget Sound area of Washington, where high levels of asbestos fiber occur naturally in the groundwater, found no incidence of disease which could be attributed to the asbestos, Welch said.

That study is soon to be published in the American Journal of Epidemiology, Welch said.

The National Institute of Environmental Health Sciences sponsored a study in which hamsters were fed asbestos fibers, he said.

A status report on that project reported on Jan. 22, 1981: "There was no indication of major differences in the mortality rate between the hamsters receiving the asbestos or the control diet."

Preliminary findings of a study in the area around Pensacola, Fla., where large amounts of fiber have been found in the water system, have found no relationship between the presence of fiber and disease, Welch said.

The U.S. Environmental Protection Agency is winding down all its studies of asbestos cement pipe, Welch said.

It is unlikely that the EPA will issue any standards for the amount of fiber considered safe in drinking water, he said.

Other than saying it would be a precedent case, Welch had little comment about the Weston situation because he said he has limited information about it.

"I have yet to see any technical data," he said.

Attachment 4

Questions from the Audience

- Question: What about people on fixed incomes?
- Answer: (Allen) We are talking about a serious health problem and it must be corrected.
- Question: Weber appears to be doubtful about the success of litigation yet Dr. Croft is so conclusive about the hazards of ingested asbestos. Why the disparity in judgments?
- Answer: (Weber) Lawyers are conservative by nature. We must prove the case and every single element of it. It will be a "frontier case" for which there are no precedents. There are risks involved. It will be no instant success. My telephone conversations with J-M representatives (Hal Olson) indicate that industry's position is that there is no risk whether it's 10 million or 100 million fibers per liter. However, other experts differ. Eleven studies have been conducted, nine of which show no hazard two of which do. We will be looking toward recovery on an airborne theory. Much of what Dr. Croft says will have great weight on whether we proceed with litigation.
- Comment: Why do we have to wait twenty years for disease to occur in our children? It would appear that ample studies have been done on this "inferior pipe" to show that it is hazardous. The pipe should be removed.
- Reponse: None.
- Question: (Lawyer) I don't want myself or my children to be a guinea pig for disease. We drink water continuously and are exposed to the air continuously. We would be greedy or foolish to ignore what has to be done in this matter and that is to remove the pipe.
- Answer: Resounding applause from the audience.
- Question: If someone gets cancer, could the Town be named a co-defendant in a law suit?
- Answer: (Weber) Yes. This is why the Town is conducting its investigations. At this juncture Weber adroitly attempted to separate the question of pipe replacement and the question as to whether the Town should proceed with litigation. He said that he would like to see the issues addressed in a phase-like manner.
- Question: (Dr. David Jenkins, Internist and Oncologist): I have been reviewing articles provided by Croft and Weber. There are two questions in my mind and they are what has to be done and how it is to be paid for. There is no question in my mind that something has to be done but I feel the industry has a "tremendous armor and defense" in the Quebec (Wigle) and Connecticut (Meigs) studies. Nonetheless, I do not want my children to be exposed to a substance which causes mesothelioma, an incurable

disease.

Question: Will distilling water reduce the fiber content?

Answer: (Croft) No.

Question: Dr. Croft, what is the most significant danger?

Answer: Airborne exposures I have seen.

Question: Dr. Croft, would you drink the water?

Answer: "I would not drink the water."

Question: Will the Town provide another source of water?

Answer: (Allen) Water will be provided at the Town Hall, which is on a separate well, at no cost.

Question: Are there less expensive methods of handling this problem?

Answer: (Allen) The results of the EPA rehabilitation studies will be forthcoming from Becher-Hoppe. I am opposed to zinc coating the pipe "due to the freeze thaw characteristics of our pipe."

Question: Will home air purifiers remove asbestos?

Answer: (Croft) The electrostatic type may do so but the fiberglass filter type probably will not. Croft then tried to explain, at Allen's request, what a micron was, but he could not. He stated that 1,000 microns equal 1 centimeter.

Question: How effective would home filtration equipment be?

Answer: (Croft) The only filtration equipment I would recommend would be those devices which cost \$1,500 - \$2,000. Allen also answered that he had received 8 to 10 calls from filter manufacturers all of whom said their equipment could not remove asbestos fibers.

Question: What is the life expectancy of A/C pipe? Why is it not more than 10 years?

Answer: (Allen) The pipe has been in since 1968 although the manufacturer only warrants it for six months. This evoked a large groan from the audience.

Question: Will humidifiers put asbestos into the air?

Answer: (Croft) Probably.

Comment: (Woman) There are two major investments here in Weston, our children and our homes. In my judgment we must consider removing this pipe as soon as possible to safeguard both.

Response: Applause from audience.

Question: Was there any data on the safety of A/C pipe when it was purchased in 1968?

Answer: (Weber) Metal pipe was originally specified for the project but the A/C pipe manufacturers pressured the Town Board to include asbestos cement. There was considerable debate about it at that time. The price difference was only \$30,000. Last October, A/C pipe producers were still advertising in the AWWA Journal that it was a good pipe for aggressive waters though DNR says it shouldn't be used in aggressive waters.

Question: How many other municipalities have A/C pipe?

Answer: (Weber) The industry estimates 225,000 miles are in the ground, but not all of it is in aggressive water. There are probably similar problems in surrounding areas.

Question: Why not just leave the pipe in the ground and save the money of removal?

Answer: (Allen) DNR probably won't allow us to leave it in the ground. It will deteriorate and contaminate our ground water. Someone shouted from the audience to send it back to the manufacturer.

Question: This pipe appears to be disintegrating very quickly, what is the chance of total disintegration and collapse?

Answer: (Allen) Dr. Croft will run a computer analysis to determine its failure date. This is why the "flexibility test" has been done. Croft added that pipe tested to date still meets specifications. (No data presented).

Question: What are the legal ramifications of hooking up to our own well?

Answer: (Weber) There are mandatory hook up provisions but these will not be enforced.

Question: What would be the cost of litigating?

Answer: (Weber) Actually a nebulous non-answer. "We are damned if we do, damned if we don't."

Question: I am concerned about the asbestos build up in my home. How can it be eliminated?

Answer: (Croft) Don't know of any data on this, but if you vacuum well and leave the windows open in the summertime it will probably go away.

Question: Don't we have to have a referendum for approving costs for the pipe removal?

Answer: (Allen) I want to get a general consensus right now.

Question: What then, is the consensus of the Town Board in this matter?

Answer: (Allen) The matter has not been taken to a formal vote but my opinion is that the pipe must be taken out.

Question: (Jim Beyer) It appears to me that we cannot give you a reasonable vote at this time. (Grumbings from the audience). Shouldn't the Board consider all the options, including rehabilitation, before we make a decision?

Answer: None.

Weston water utility

Straw vote: Replace asbestos pipe

By DON OAKLAND
Herald Staff

About 114 town of Weston water utility customers told the utility board Wednesday night they want 20.4 miles of asbestos-cement water main removed as soon as possible.

"I don't care about the lawsuit, I want to get some fresh water into my house," said James Gould, 5425 S. Duane St., Joliet.

His remark characterized the feeling of most of the 120 persons attending the public meeting, called to discuss the problem of deteriorating asbestos-cement water pipes in the town.

In a straw vote, only six persons voted against directing the town's utility board to proceed as quickly as possible to replace the pipe.

The water utility serves about 1,700 homes in Weston.

The cost of replacing the pipe with ductile iron mains is estimated at \$4.4 million, said Archie Becher Jr., president of Becher-Hoppe Engineers Inc., Schofield.

It would take approximately three months to perform the engineering for such a project. With maximum effort, the construction work could be performed within a year, Becher said.

The water utility will look at alternatives to financing the removal of the pipe and study possible options for financing the project, said Town Chairman Jack Allen.

However, Allen thought anything

short of replacing it would be unlikely.

"If you want my opinion, let's take it out," Allen said.

Allen calculated that if the \$4.4 million were apportioned to utility customers, a special charge of \$200 annually would be added to each water bill annually for 10 years.

However, that cost could be brought down by utilizing some of the town's general fund or if the town would be successful in a lawsuit against the manufacturers of the pipe, he said.

Some people at the meeting said their health is more important than the cost of the project. The problem is already costing residents money because of a detrimental effect on the value of homes in Weston, one woman said.

"I don't think people will pay too much for homes in Weston," she said.

The vote to replace the pipe came after about two hours of discussion on the potential health hazards of asbestos-cement pipe and a possible lawsuit.

Thus far the research has shown that portions of water mains have deteriorated, to almost an eighth of an inch in some pipes, and asbestos fibers have been released into the drinking water, according to William Coffey, director of Wisconsin Dept. of Natural Resources, Madison, an ecologist hired by the town as a consultant.

Asbestos fiber has been shown to be a cancer-causing agent when inhaled.

See REPLACE, Page 3, Column 7.



Replacing water mains costly

Archie Becher Jr., president of Becher-Hoppe Engineers Inc., Schofield, tells about 120 customers of the Weston Water Utility that it would cost \$4.4 million to remove 17,724 feet of asbestos-cement water mains in the town.

That assumes the pipe would be replaced with ductile iron water mains and that existing service would not be disrupted as new pipe would be installed, he said. Next to Becher are Jack Allen, town chairman (center) and Richard Weber, town attorney. A wide angle to take this photograph causes distortion.

—Herald photo

(From Page 1)

haled. There are more than 25,000 lawsuits in the United States related to injuries suffered by persons inhaling fibers, Croft said.

However, there are no cases involving the drinking of water containing fibers.

"Our's would be a frontier case," said Richard Weber, town attorney.

Croft contends whether you inhale or drink the fibers, they still enter the body, circulate through it and create a potential for cancer, particularly a tumorous cancer of the lung or abdominal cavity called mesothelioma.

He has done research in Wisconsin over the past two years in which dairy cattle at slaughtering houses were checked for cancer. Cattle found with mesothelioma were traced back to farms. The water those some of cattle drank while on the farm contained asbestos fibers, Croft said.

Croft has found in Weston, fiber in the drinking water ranging from a half-million to 46 million fibers per liter of water.

"There have been a significant number of samples with about 10 million fibers per liter," he said.

Asked if he would drink Weston water, Croft responded: "I would not drink the water."

Croft has also found fibers in air of homes hooked to the water system.

"Homes that were connected to the water utility had fibers in the air," he said. Homes with private wells had no fiber.

The asbestos in the air is a greater health hazard than asbestos in the drinking water, Croft said.

One to five fibers were found per cubic centimeter of air in homes. The Occupational Safety and Health Administration has ruled two fibers per cubic centimeter of air unacceptable, Croft said.

Because of women and children, some recommend levels no greater than two-tenths fiber per cubic centimeter of air in homes, he said.

"We think we can show a causal relationship between fibers in the pipes going into the drinking water and subsequently into the air," Weber said.

More data needs to be collected before a decision can be made whether to sue the manufacturers of the pipe for damages, Weber said.

He warned it would not be an easy case and there are no assurances the town would win.

Dr. David Jenkins, 2006 Hemlock

St., Schofield, a Weston resident and specialist in internal medicine in Wausau, offered a similar warning.

"There is a significant amount of argument against what we are saying."

"I would be guilty of malpractice if I stated we have a gold plated case," Weber said.

Such a case could take a year to try and two to three years if appealed, he said.

A spokesman for the A/C Pipe Producers Association, Arlington, Va., who attended the meeting, this morning expressed skepticism of Croft's claims.

"The claims that Dr. Croft is making I'm highly skeptical of, especially those concerning asbestos in the air," said John Welch, public affairs director of the association.

Welch found it difficult to believe that airborne asbestos in Weston homes is higher than in factories where asbestos products are manufactured or handled, as Croft's figures would indicate.

A relationship between asbestos in drinking water and airborne asbestos fiber "has never been corroborated by any other scientist in the world," Welch said.

No technical data was presented at the meeting which showed actual deterioration of the pipe or that the pipe no longer meets specifications, Welch said.

"I was dismayed somewhat that Mr. Allen did not provide an opportunity for the industry to present its position on the safety of its product," Welch said.

The cost of replacing the pipe may be less costly than if a utility customer sued the town for providing unsafe water, said Dr. Michael Alt, 2311 Summit Ave., Schofield, in Weston.

Weber conceded that if the town did nothing, it would be vulnerable to such a suit.

Town residents can do little to protect themselves from the asbestos other than not using the water, Croft said. The town does provide water that has not circulated through the mains at the municipal center, Allen said.

Filtering the water is not practical because the fibers are so small, Croft said.

Air purification systems, particularly electro-static systems, could reduce the amount of fibers in the air in a home, Croft said.

Croft's research has found no asbestos in the groundwater, soil or bedrock underneath the town.

Worried About

RECEIVED JAN - 4 1982

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December 28, 1981

Liberty Mutual Insurance Co.
421 South Military Avenue
P. O. Box 3039
Green Bay, WI 54303

Attention: Mr. Rod Hughes
Claims Manager

Mr. John F. Welch
Director of Public Affairs
A/C Pipe Producers Assoc.
1600 Wilson Blvd. - Suite 1308
Arlington, VA 22209

RE: Town of Weston - The Flintkote Co.

Gentlemen:

Enclosed to each of you, you will find photocopies of articles appearing in the Daily Herald of 12/16/81 and 12/17/81 respectively. I am also enclosing to John a photocopy of an article received from Rod relating to Fairleigh Dickinson University studies on the effect of asbestos fibers in water. You may be aware of that study, John, but if not, I am certain you would want to follow up.

I just heard via the grapevine that Attorney Dick Weber, representing the Town of Weston, has been in touch with Philadelphia counsel with respect to instituting a lawsuit. Although Attorney Weber was very circumspect in his statements relating to the probability of success, the Town Chairman asserted on two occasions that he felt the probability of success was excellent and fully expected to make a recovery. Given that attitude, I think a lawsuit is all but certain.

With respect to a theory of recovery on that lawsuit, there seems to be a rather distinct shift in the Croft approach. Initially, all literature appearing in the newspaper had to do

with the uncertainty of the effective asbestos fibers in water. All discussion was related to the health hazard incident to drinking. During his presentation at the meeting, he made it clear that he had undertaken significant studies relating to the amount of asbestos fiber getting into the air. Clearly, what he is attempting to do is to develop an alternative theory premised on the known health hazard incident to the inhalation of asbestos fibers as opposed to ingestion. The scientific footings for his findings of released asbestos fibers in the air would appear to be rather circumspect.

I want to remind you, John, that you have agreed to furnish me with a resume of your views and observations from the meeting, together with a copy of the Crivitz Court opinion, both of which I think will make interesting reading for myself and Rod. I think we can continue to profitably share what information we develop and see no evident current conflicts of interest or such conflicts prospectively.

Ned Rahn called recently asking that I furnish information to him relating to the statutory procedures necessary for the Town of Weston to follow to make an implemented decision to remove the pipe and install new piping. I personally do not have the time to conduct that research, but will have a younger member of our office take a look at that issue and furnish the information shortly after the first of the year.

Sincerely yours,

Douglas J. Klingberg
Douglas J. Klingberg

DJK/cs
Enc.

P.S. John the Weston Town Bd & water
utility have a meeting scheduled
1/11/82

Asbestos In Water Safe, Say FDU Tests

By ED SPERLING
Staff Writer

MENDHAM — Recent tests at Fairleigh Dickinson University, Raritan Park, show small asbestos fibers, such as those found in the borough's drinking water by Rutgers University researchers, do not cause cancer.

In the experiments, hundreds of white laboratory rats were fed about 13 billion fibers of asbestos per liter — about 3,200 times the concentration of asbestos detected in Mendham's water. The animals died of old age, not cancer.

The same experiment was repeated with laboratory hamsters, which show an equal sensitivity to cancer. The results were similar.

Dr. William E. Smith, who led a team of scientists in the country's first experiments of this type, said the results are probably more definitive than if people were used.

"Human beings are exposed to a variety of things," Smith said. "Laboratory animals can be exposed to certain well-defined substances."

There were some cases of cancer in the laboratory animals. But those animals not drinking water laced with asbestos fibers showed equivalent cancer rates, indicating the asbestos was not carcinogenic, Smith said.

The purpose of the tests was to determine if asbestos fibers in drinking water are dangerous and whether large amounts of money should be spent to develop filtering systems.

"If you look for asbestos in drinking water, you will find it more often than not," Smith said. "Asbestos is part of the earth's crust. When they grind rocks for roads it often releases asbestos fibers."

The university's studies confirm tests now under way by the federal Environmental Protection Agency in Cincinnati, Ohio. Both sets of tests showed no difference in animals drinking water containing asbestos and those drinking asbestos-free water.

However, the Federal Register on Nov. 28, 1980, said for "maximum protection" from cancer, drinking water should be asbestos-free.

HJ-D12 DAILY RECORD
MORRISTOWN NJ
(E)59,000 (S)67,000

Which Insurer is liable for asbestosis cases?

The U.S. Supreme Court will soon decide whether to wade into a controversy over which insurers should pay claims against asbestos manufacturers by victims of the chronic lung disease asbestosis—payments that are likely to add up

to billions of dollars. The outcome could set the pattern for determining liability in a growing category of cases involving long-term risks.

The product-liability insurance carrier that covers a company when a victim is injured is generally the one responsible for a claim. The current problem is how to apply that rule to a condition that builds up cumulatively for many years—in the case of asbestos workers, perhaps over more than two decades. Asbestosis victims are claiming that asbestos manufacturers are responsible because they did not warn of dangers in applying the product. But over the decades in which victims developed the disease, most asbestos makers had more than one insurance carrier, and the issue now is who should pay.

Such companies as Aetna Life & Casualty Co. and Insurance Co. of North America (INA) argue that liability belongs to the company that has the policy when the illness first becomes manifest. But others, led by Hartford Accident & Indemnity Co. and Travelers Corp., believe that all the insurers covering the defendant company while the victim was exposed to asbestos fibers should share the cost of damage payments. Manufacturers generally support this "exposure theory" because it will give them more protection by spreading the responsibility among many companies. A couple of large awards to victims whose diseases become manifest in any given year—and awards of more than \$100,000 are not unusual in these cases—would exhaust the coverage under some policies.

A lot at stake. *Asbestos Litigation Reporter*, a newsletter covering the issue, estimates that 12,000 asbestosis cases are already in court and that the total is growing by at least 100 a week (BW—Apr. 13). Aetna estimates there will be "50,000 to 100,000 asbestos-related disease cases within the next few years." Furthermore, insurance company lawyers agree that the approach finally adopted for asbestosis cases will dictate how the liability is split for illnesses caused by other compounds.

ers Vice-President Floyd Knowlton says DES—diethylstilbestrol—is a synthetic form of estrogen once commonly given to pregnant women to lessen the risk of miscarriage. It is a suspected cause of cervical and vaginal cancer in those women's daughters. Agent Orange, a defoliant used extensively by the U.S. in Vietnam, allegedly caused injuries to U.S. troops exposed to it. John P. Ar-

ness, a lawyer for Hartford, notes that the biggest impact will be from materials not yet even suspect. "There are things causing harm right now that scientists won't even find out about for a year or two."

Chaos. Last year two U.S. Courts of Appeals accepted the "exposure theory" of parceling out liability in asbestosis cases, but other courts have since taken different approaches. The U.S. District Court in Boston opted for the argument that liability belongs to the company that has the policy when the illness becomes manifest. But on Oct. 1 the U.S. Court of Appeals in Washington bought neither approach and instead found every insurer liable for the entire damage claim. "It is creating chaos," complains Aetna Vice-President John F. Shea Jr. "There is complete confusion in everyone's mind over how we should handle these cases."

Adding to the confusion is the fact that insurance is regulated by state law. The cases are in federal court only because the victims are residents of one state and the companies they are suing have headquarters in others. In such cases, federal courts are supposed to apply state law.

But on the issue of diseases that build up slowly, "there isn't any applicable state law as far as I can see," says Eugene Gressman, a University of North Carolina law professor who is working for INA on the issue. At the same time, he says, "It's certainly not a matter of federal law or policy."

The specter of different rules in different states frightens the insurance companies more than anything. That, they argue, would lead to more litigation and more expense. The Supreme Court has specifically invited insurance companies that have not submitted briefs on the issue to get them to the justices before the court decides whether to take the cases. The betting in the industry is that some sort of Supreme Court ruling will come down. And the hope is that even if it is based on the law of a specific state, it will carry enough prestige to make all other jurisdictions fall in line.

12A-20 BUSINESS WEEK
WEEKLY 750,000

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