

# Service Reporter

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## Boilers operate better with water treatment

*System eliminates chemical use*

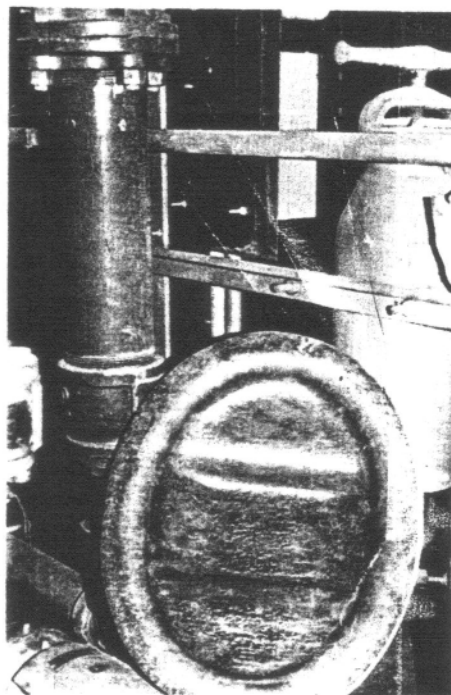
**B**ob Havener has been working with the Building Department of Ft. Wayne Newspaper Inc., since the Indiana plant opened over 25 years ago. When Havener became the building manager in 1975, he assumed responsibility for all building maintenance, including the safe and efficient operation of the boiler equipment in the 150,000 sq ft, two-story plant. The two 100 hp boilers at the plant had been chemically treated for years, and, although they were still operating well, a lot of lime/scale buildup was present.

Havener decided to consider the advantages of adding the Superior water treatment system with non-chemical water conditioners from Kemtune Inc., Ft. Wayne, Ind. The system was designed to prevent hard lime/scale buildup, which would allow the boilers to operate at peak efficiency. By using the conditioner, Havener would no longer have to mix the chemicals and constantly monitor their effect on the boiler system. The multifield Permacore contained in the conditioner would suspend the minerals, preventing them from forming lime/scale. Normal blow down procedures would then purge the system of the minerals.

### Installation takes place

In fall, 1981, water conditioner model RT-2000 was installed on the 2" common water line that feeds both boilers from the condensate supply tank. A smaller unit, an RT-1000, was placed on the 3/4" city water line that feeds make up water into the condensate tank. Don Schiebel, a consulting engineer with Wayne Pipe Supply, a Ft. Wayne industrial plumbing and heating wholesaler,

was in charge of the installation. "The treatment system really cleaned up the boilers," he states.

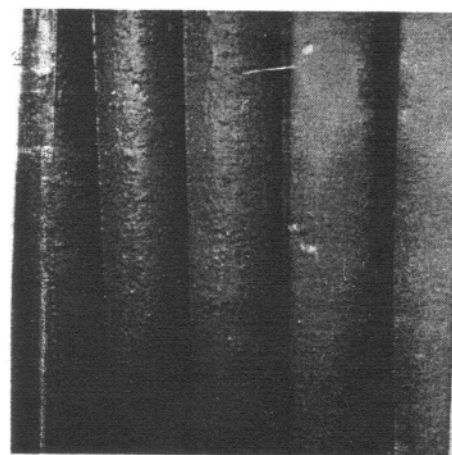


Last June the boiler at Ft. Wayne Newspaper was opened for inspection. The manhole cover was lime/scale free. The cover is displayed by the Superior water conditioner.

"Before the installation I was treating my boilers with the various chemicals you use on boilers," says Havener. "Then, the idea of using this water conditioner came up, and I thought I'd give it a try. The idea was to eliminate all my chemicals, and this is what I did. This is my third heating system with the water conditioner on the boiler."

"The difference I saw right off the bat," reflects Havener, "was when I used the chemicals, after removing the handhole and manhole covers, I always had to use a wire brush to clean them before I could put them back together."

Every year the boilers at Ft. Wayne Newspaper are torn apart, cleaned and inspected by Havener. "I always had to clean the manhole and handhole covers. Since the water conditioners were put on the line, those covers look like the day I installed them."



The boiler tubes were found to still be in excellent condition. A thin coating of aragonite, a by-product of the suspended minerals, protects the pipes from corrosion.

### The tubes

"As for the tubes," Havener explains, "the water conditioner is supposed to eventually take all the scale off them. Now, I can't look at those tubes and say that the scale was less than it was, but I sure can say it's not any worse."

He adds: "By going from what's happening to the manhole and handhole covers, I can just about say the tubes don't have any additional buildup, as there's nothing being put on the covers themselves."

Although Havener can't provide a production estimate as far as fuel consumption savings, as steam production at the plant is not measured in proportion to degree days, he claims the system has saved dollars as no chemicals for water treatment have to be purchased.



## **FORT WAYNE NEWSPAPERS**

*The Journal-Gazette ♦ The News-Sentinel*

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December 27, 1990

Mrs. Beth A. Hill  
Director of Public Relations  
Kemtune, Inc.  
2015 South Calhoun Street  
Fort Wayne, IN 46857-1325

Dear Beth:

I have worked for the Fort Wayne Newspapers, Inc., for 38 years and have served as Building Manager for the last 15 years. Some of my duties as Building Manager include taking on the responsibility for the safe and efficient operation of the boiler equipment in the plant.

Prior to 1981, chemicals were used to treat the boiler water. This required accurate mixing, injection, and then monitoring to assure the proper p.p.m. of each of the four (4) chemicals to make sure that they were correct in providing the right concentration for the control of scale and corrosion. Approximately 4 to 5 man hours were required each week just to pull water samples for analysis, mix and add chemicals.

Perhaps the most troublesome problem that I experienced prior to the installation of the Superior Water Conditioner, was the frequent priming of the boilers. I cannot say for sure the exact cause of the carry-over and flood-ing of the header, but it was a very severe problem that required a lot of time and involved losing all the chemicals in the boiler, and the loss of energy to reheat the cold water pumped into the system.

Even though we hired an outside consultant and followed his instructions closely, the flooding of steam headers continued and could only be corrected by shutting everything down and draining the boilers and start over again with fresh cold water and injecting more chemicals.

In 1981, we installed a model R-2000 Superior Water Conditioner on our two (2) two-hundred-horsepower Clever-Brooks Steam Boilers. The boilers are inspected every two years by the state boiler inspector and have been found to be as clean or cleaner than when we were using chemical treatment. Besides the four (4) water treatment chemicals, I also used a condensate return line chemical treatment prior to the installation of the Superior Water Conditioner.

The two (2) boilers are thirty-three (33) years old and have never been retubed. The boilers are opened annually and a mere flushing with water is all that has been required since 1981.

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We employ approximately 550 people, and print over 150,000 Sunday newspapers, 65,000 morning papers and 65,000 evening daily papers, so the boilers are considered a very important part of our operation.

All chemical additives have been discontinued, the time-consuming testing, monitoring, and adjustments have been eliminated plus the priming of the boilers have totally disappeared since the installation of the non-chemical water conditioner.

I can say with certainty that we have experienced as good as or better results, and we are still able to prevent water pollution, save time, energy and money, as well as to eliminate the storage handling and use of what is considered to be hazardous material. Needless to say, we are well pleased with the performance and will continue to use this "user-friendly" method of treating our boiler water.

Sincerely,

A handwritten signature in cursive script, reading "Bob Havener".

Bob Havener  
Building Manager