

## Plans for water filtration plant in Harwich move forward

By **Jamie Balliett**

**Harwich Oracle**

Posted Jan 08, 2010 @ 07:22 AM



HARWICH — Turn on the tap and you may notice an occasional cloudy glass of water with a tinge of brown. This seems a bit odd for a town that has award-winning, high quality water.

Although a dark brown ring around the inside of a toilet and by the drain of a bathtub is unsightly, these reports do not reveal a health hazard, say officials from the water department.

The culprit is a naturally occurring excess of iron and manganese in the municipal water supply, and the town hopes to tackle the problem with a new filtration plant to be built off Depot Road.

Craig Wiegand, the town's water department superintendent, sat down with Harwich Oracle to review the problem and talk about the proposed \$4.5 million filtration facility that is expected to come before voters at spring town meeting

"We've been monitoring the issue for the last 10 years. In the past we've been able to mix water from different wells to lower the levels," Wiegand said, who noted that some wells seem to have larger mineral deposits than others.

"But the overall amount has increased and people are beginning to notice," he said.

Although the extra iron and manganese levels are low enough that they are not harmful to consumers, Wiegand said that the aesthetics of clear water are important to customers.

The proposed 5,000-square-foot facility would be operated by existing personnel. The facility will be controlled with a state of the art computer system that monitors filtration. The computer is so smart that it can e-mail or call water department staff if something is wrong.

Water that is pumped from any of the town's five well fields will be rerouted to the proposed plant after receiving basic chemical treatments through a central piping system. Once there, it would flow into one of five large steel containers that are 12 feet in diameter and 12 feet tall. To remove iron and manganese, these containers rely on technology that is thousands of years old: sand filtration. The filter product, commonly called "green sand," uses granules to capture the minerals simply by pushing the water with pressure through the thick layer at the bottom of the tank.

Mark White is the principal at Environmental Partners in Quincy, Mass., the firm providing technical assistance to the town for the new plant.

"One advantage is that the system has very low operating costs," said White, who explained that once a high concentration of iron and manganese is reached in the sand filters, the material is removed and dewatered in large lined lagoons that sit adjacent to the facility. From there it is trucked off-site to suitable landfills.

Sometimes being the last town to do something has its rewards. Orleans, Chatham, Brewster, and Dennis have all built filtration facilities to remove iron and manganese from their water supplies. Some have used green sand and others, like Orleans, use a filter made from porous membranes. The membranes, which last about a decade, are expensive to replace. This is what led the water department to choose the green sand technology.

The latest community to open a facility was Dennis, last September. The \$8.6 million project, which also uses green sand, resulted in two separate, but identical, buildings on either side of town.

In order to pay for the filtration plant, Harwich is seeking state authorized loans that are dedicated to infrastructure projects like this. The town already has one loan approved for \$1.5 million that was targeted for the water department last year. It is seeking to pair this with a second loan of \$3.5 million and will know sometime in January if they are approved for the two percent bonding authorization.

Once the funding is secure, the item will be placed on the warrant for the spring town meeting. Wiegand said that it's been a while since the department went to the taxpayers for their support.

"Over the last nine years, the only major project was \$2.8 million for the new water tank in 2005," he said.

When asked about how this new facility will impact rates, Wiegand said the department hadn't calculated sufficient numbers yet. He said that he plans to hold at least one public meeting at the community center in February to explain the project to residents and provided detailed information.

Wiegand pointed out that a name has already been picked for the new building: "The Bruce Cahoon Water Treatment Facility." Cahoon, a water department assistant superintendent, died in 2009 after working 54 years for the town.

"He was just amazing in what he knew about this department," said Wiegand. "We'd sit down and go over maps and he'd just pour out the details about each place. Bruce was so valuable to us."



Copyright 2010 Harwich Oracle. Some rights reserved

Comments (0)

Login or register to post a comment:

Login

Username:

Password:

Forgot password

Register

Email:

First Name:

Last Name:

I agree to the terms of use

I am over 13 years of age

NOTE: Your inbox must accept emails from "no-reply@gatehousemedia.com"



[Contact us](#) | [Privacy Policy](#) | [Terms of Service](#) |

Harwich Oracle | 5 Namskaket Road Harwich, MA 02645

Copyright © 2006-2010 GateHouse Media, Inc. Some Rights Reserved.

Original content available for non-commercial use under a [Creative Commons](#) license, except where noted.

SEO by eLocalListing | [Advertiser profiles](#) | [Cherrp Local](#) | [Harwich Real estate](#) | [Find your Wicked Local Town](#)