

Cool drinks are a hot item at Red Wings victory parade

Tom Urban usually does pipe-welding and other maintenance work in Detroit Thermal manholes and steam tunnels,

where temperatures can reach more than 100 degrees. He knows how good a cool drink of water tastes when you're in a hot environment for a long time.

So when Red Wings fans lined the streets of downtown Detroit on a

very hot day for the Stanley Cup Parade, Urban, a tradesman for Detroit Thermal, knew they would appreciate free bottles of water. Detroit Thermal contributed more than 1,000 bottles of water, which Urban and other Detroit Thermal employees handed out.

"It was a chance to introduce our business to lots of people," Urban said. "Many people aren't aware of Detroit Thermal and the important role it plays in the life of downtown Detroit. We are proud of our company and our contribution and want people to know about us."

Because of his suggestion Urban's

fellow employees nominated him for the Bravo Award, which is given to one employee a month. "Tom earned it because of his creative marketing effort," said Victor Koppang, Detroit Thermal general manager.

Urban is proud of the company, the reward and the Red Wings. He says he made it to just one game last season but hopes to attend more this year. The 2008-2009 Red Wings season opens at Joe Louis Arena on Oct. 9 with a game against the Toronto Maple Leafs.

"It would be great to have a Stanley Cup Parade next year too," Urban said. ■

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The Detroit Thermal VOICE

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DETROIT THERMAL, LLC IS A THERMAL VENTURES II, LP COMPANY

WELCOME

Customers, employees play key roles in the paradigm of our success



Victor Koppang (right) and Dale Loomis, Detroit Thermal environmental, health and safety coordinator admire the company logo that Loomis painted on the office wall.

There are two key elements that ensure success in any business: satisfied customers and dedicated employees.

In my first few months at Detroit Thermal, I have seen firsthand how employees in every department strive to make our company the best in our industry. They take pride in the investments that have improved the system's infrastruc-

ture – upgrades in the steam production facilities and the steam distribution network – and they play a vital role in the regular preventive maintenance programs and many other projects designed to make Detroit Thermal a worry-free energy source.

FOCUS ON SATISFACTION

With these efforts in place and while maintaining our attention to reliability, safety and efficiency, we are now broadening our efforts to focus in greater depth on customer satisfaction. Growth and retention is our goal, and we can only get there if we listen and respond to our customers.

Our increased emphasis on customer satisfaction begins with more in-person visits. Account executives are getting out of the office and into the field more so that they can better understand each customer's unique situation. They are work-

ing more closely with customers to ensure that every facility on our system takes maximum advantage of our service.

HELPING THE CITY GROW

Our account executives are getting to know our customers better – and so am I.

I am learning about the vital role our customers play in the health and development of our city, and I'm proud of the way our company supports them. We provide the environmental comfort that lets them focus on the prosperity of their businesses, on the welfare of our city and on the health of our community.

That's our job – one we take pride in, one we are committed to, and one we intend to do well into the future.

Victor Koppang, General Manager, Detroit Thermal LLC ■

Periodic trap surveys a good investment

Trap surveys are a regular part of the annual preventive maintenance program at Children's Hospital of Michigan, and for good reason.

"Traps are prone to failure," said Gerald R. Tilson, plant manager of facility/engineering/construction at the hospital. "We usually find that 10 percent of our traps have failed every year, and a failed trap is wasting money."

In fact, Tilson estimates that by repairing the failed traps identified

by its most recent survey, the hospital will save about \$97,000 this year.

The stressful environment in which traps operate, with steam on one side and hot condensate on the other, is a major factor in their high failure rate. Traps may fail in an

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Contract with city's resource recovery plant is extended through June

The concept of alternative fuels has gained popularity as the nation copes with rising energy costs, but it has long been a standard part of the business at Detroit Thermal.

Detroit's district heating system has been using steam generated from the city's solid waste since the Greater Detroit Resource Recovery Authority (GDRRA) began operations, in 1989. The relationship between Detroit Thermal and GDRRA was extended recently through a bridge agreement that calls for GDRRA to sell its steam to Detroit Thermal through June 30, 2009. The agreement goes into

effect in December 2008, when the current contract ends.

"Having the bridge contract in place allows us to begin negotiating a long-term agreement," said Victor Koppang, general manager of Detroit Thermal. "We want to continue to have access to steam generated using refuse. It provides us with an important alternative to natural gas, which is used to fuel the boilers at the Beacon Plant, and it allows the city to efficiently handle the tons of waste that are generated every day."

The GDRRA facility was built as a co-generation plant, burning waste and producing both steam and electricity. About 75-80 percent of Detroit Thermal's annual load is produced at GDRRA's facility, on Russell and Ferry streets. There, the city's garbage is processed into refuse-derived fuel, which is burned

to produce 500,000 pounds of steam per hour for the Detroit Thermal distribution network.

"Refuse-derived fuel is a renewable resource, one that can only be accessed and distributed by a large system such as ours," Koppang said. "It lessens our dependence on any one fuel source and helps us control our carbon footprint."

The arrangement has important advantages for the city, too, helping it to dispose of tons of trash without trucking it to landfills, trips requiring extra time and extra fuel.

"Modern cities must tackle two issues at the same time: waste disposal and energy efficiency," said GDRRA Director John Prymack. "Our agreement with Detroit Thermal is an important part of the solution to both problems. We look forward to this new phase in our relationship." ■

Periodic trap surveys a good investment

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open position, which allows steam to continually pass through; or they may fail closed, forcing the condensate to back up and allow water to remain in the line, decreasing the efficiency of the steam system. In addition, a lot of water in a steam line can result in water hammer, which may damage the pipe.

There are more than 300 traps in the Children's Hospital steam system, which uses Detroit Thermal

steam for heat, domestic hot water, humidification, steamers in the dietary area and sterilization in small flashclaves throughout the more than 600,000-square-foot facility.

The Children's Hospital survey, which was done last winter, did not cause any interruption in comfort levels or processes. "There was no disruption to anything going on in the building," Tilson said.

steam consumption and called Tilson to make sure it wasn't an early warning sign of a developing problem.

"I was pleased when Gerry told me the reduction in consumption was due to his preventive maintenance trap survey and repairs," Kozar said. "We always tell customers about the value of regular trap surveys, and Children's Hospital is proof that they can help improve efficiency and reduce steam consumption."

For more information on trap surveys, see the summer 2007 issue of *The Detroit Thermal Voice*. *The Voice* is posted on the company's Web site, www.detroitthermal.com. Click on pressroom, then click on newsletters. Or, contact Kozar at 313.963.3844. ■

Trap surveys are an important part of Children's Hospital's regular preventive maintenance program.



Detroit Thermal Senior Account Executive John Kozar noticed a reduction in Children's Hospital's

UPDATE

**WORKING TO MAKE
DETROIT THERMAL A
GREENER COMPANY**

Because Detroit Thermal is committed to being an environmentally responsible corporate citizen, the company has formed a committee to identify and promote practices that will help reduce its carbon footprint and provide advice to customers who are interested in “going green.”

Of course, providing steam system-wide already makes good sense environmentally, says Cheryl Garrison, Detroit Thermal account executive.

“Steam produced by Detroit Thermal has green advantages over a district full of small boilers,” Garrison said. “Detroit Thermal is able to take advantage of economies of scale.”

The company also has instituted a paper-recycling program and installed energy-saving electric light retrofits and automatic light switches.

It has posted information about the nationally accepted Leadership in Energy and Environment Design (LEED) building standards program on its Web site and is studying other ways in which it can reduce its carbon footprint.

For more information, visit www.detroitthermal.com, click on company overview, and click on LEED mission statement. ■



Smooth new pavement hides a rebuilt manhole located 24 feet underground.

Regular preventive maintenance enhances system's reliability

Detroit Thermal believes that the best way to ensure reliability is to take action before problems occur – and that's the goal of Detroit Thermal's extensive preventive maintenance program, a multi-year agenda that involves regularly inspecting, repairing and updating potential trouble areas.

Case in point: All the valves at the steam system's pressure-reducing stations were taken apart and completely rebuilt this summer.

AVOIDING DISRUPTIONS

“The valves should last five years or longer but we rebuild them every four years,” said Paul Razo, Detroit Thermal distribution manager. “That way we know they'll all be in good working order when the heating season starts. We avoid surprise failures that might be disruptive to customers' service.”

Each of the six stations includes four 10-inch valves that reduce steam pressure from the high-pressure lines coming out of the Beacon Plant to the lower-pressure lines that feed steam throughout Detroit Thermal's service area.

The work is done inside the manholes that house the stations. Detroit Thermal technicians take apart and rebuild each valve; they clean all the internal sections of the valve and replace the lines that are connected to it. Later, they inspect all the parts they removed and save those that don't show any signs of wear for reuse in another rebuilding project.

Pressure-reducing valves are rebuilt in the summer, when the steam load is low. Customers who use steam are served

through other lines while the work is done, so there is no disruption in service.

TUNNELS, MANHOLES GET CARE

The tunnels that house the large pipes – 85 feet below the city's streets – also are inspected during the summer. This year, some areas were reinsulated, and more supports were added where needed.

Manholes also get inspected. Razo's goal is to get every one of the nearly 1,000 manholes in the system inspected twice a year. “If we spot a small leak, we can take care of it relatively easily and avoid a larger problem later,” he said.

One of the major preventive maintenance projects undertaken this summer was the rebuilding of a manhole behind the Beacon Plant. The manhole, located 24 feet underground, contains a main feeder line. “We did the entire job without shutting down the line,” Razo said.

In order to keep the line operating and to protect it and the trap lines in the manhole, pea gravel was piped into the manhole until the lines were well covered. Then the concrete roof, which is 12 feet below street level, was removed. When pieces of concrete fell into the hole, the pea gravel absorbed the blows. When the old roof was gone, the pea gravel was vacuumed out of the manhole and new concrete walls and a new concrete roof were installed.

“Our goal is to eliminate the chance that anything will fail,” Razo explained. “It's part of the Detroit Thermal emphasis on reliability.” ■