Newton fire department saves gas

Written by Gina Lindsey (O-N-E Staff Reporter)

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The Newton Fire Department didn't just meet the city manager's request to conserve fuel, it doubled it with a plan to save 10 percent of its gas.

"The environment we're in, every little bit counts," said Newton Fire Chief Kevin Yoder.

The fire department initiated fuel conservation measures on May 6 after Newton City Manager Todd Clark asked each of the city departments to come up with a plan to reduce fuel consumption. The first nine of the department's 16 fuel conservation requirements went into effect on May 6. He added seven more fuel saving measures on June 13, after Clark requested departments to reduce consumption by 5 percent on June 1. Yoder not only met the city's request, he doubled it.

The Newton Fire Department is the city's second largest consumer of fuel, after the Public Works Department. This year the Newton City Council increased the fire department's fuel budget by 43 percent, from $25,950 to $37,150 on account of the gas prices. The Newton Fire Department has five engines, four large vehicle units , and seven administration vehicles with the budget.

Yoder said prior to restrictions, the firefighters were allowed to take one of the fire engines to a restaurant to eat once a week. He said those trips are no longer allowed. It is also required that all administrative staff ride to emergencies on one of the fire engines rather than taking an additional vehicle.

"We don't feel like we were wasting fuel to begin with," Yoder said. "We just didn't tighten the reins this much."

In May, the department used 197.59 gallons of regular gasoline and 724.42 gallons of diesel fuel. In February the price of gasoline for the reduced city rate was 2.32 cents per gallon, a rate that remained consistent until May when it increased to 2.86 cents a gallon. In April, the price of diesel rose from 2.72 cents per gallon to 3.24 cents per gallon.

Yoder said the fire engines burn the most fuel. He said the engines must remain running during emergencies to run the required emergency lights on the truck and pump water. He said the engines work at 1,200 to 2,000 rotations per minute during water pumping to get the 1,200 pounds of torque necessary to move 1,500 gallons per minute.

In 2007, the Newton Fire Department responded to 766 emergencies, which each lasting an hour on average. Considering two to four engines respond to each emergency call and the vehicles much remain running, Yoder said the majority of the fuel is used while those vehicles idle.

"We have a very small margin where we can save," Yoder said.

The department has responded to 373 calls this year.

"With fire engines, it's not miles to the gallon, it's gallons to the miles," Yoder said.

He believes changes in hydrant maintenance will provide the biggest fuel savings. The department has to visit each of the city's 900 fire hydrants twice a year to check the water flow and put oil in the hydrant. Typically, the department has had four or five firefighters working on hydrant maintenance at a time using two to three vehicles including fire trucks. Now, two firefighters do the work with one Ford Super Duty.

Another measure was to require the firefighters to do their required physical fitness training at the fire department stations. This effectively ended training at other locations as they had done in the past, including visits to gyms and the Newton Recreation Department.

Yoder also forbid administrative staff from driving their work vehicles home, unless they are on call. He said this cut the number of administrative vehicles making the daily commute back and forth by half, dropping from five to two.

Other things the department is doing to save gas include planning travel routes in advance to avoid unnecessary trips, removing excess weight from the vehicles, operating a speeds below 55 mph, avoiding unnecessary idling and performing proper maintenance on vehicles to maximize fuel efficiency.

Box: May 6 Restrictions

1. Eliminate unnecessary trips.

2. Plan all travel routes in advance.

3. Remove excess, unnecessary weight from vehicle.

4. Operate vehicle at speeds below 55 mph.

5. Avoid unnecessary idling of vehicle.

6. Develop and maintain proper driving habits, i.e. do not over

accelerate, avoid constant braking.

7. Ensure adequate tire inflation at weekly intervals.

8. Monitoring vehicle Preventative Maintenance Program to ensure that

vehicle scheduled maintenance is performed at established intervals.

9. Elimination of multiple vehicles traveling to the same location when possible.

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