By Harriet Halbig

The Lewis-Palmer District 38 Board of Education approved the purchase of two boilers for Palmer Ridge High School and received grants for eight projects from Monument Hill Kiwanis Foundation at its Oct. 11 meeting.

Palmer Ridge boiler discussion

Assistant Superintendent Cheryl Wangeman explained the problems with the geothermal system at Palmer Ridge High School and proposed solutions.

When the school was constructed in 2008, this was the largest geothermal field in the state. The primary problem currently is leaks. Although several companies were involved with reviewing the system before use, it was later discovered that there were no air bleeders or strainers in the system and the valves were inadequate.

Consequently, in addition to leaks there was gravel and sand in the water. In response, bleeders were added to remove excess air and strainers were added to remove rocks and gravel. Valves were added to make it possible to close off parts of the system when necessary.

During last summer, Major Geo-Thermal and ME Engineering were hired to locate the source of the leak and purge the sand and gravel. As of September an additional leak was found. Although circulation was improved, there are now pieces of piping in the materials coming from the field, indicating failure due to installation deficiencies.

If all deficient areas were capped, it would remove 20 percent from the field. This would make it difficult to keep the building warm in the coming cold months.

The district has notified its insurance carrier and Saunders Construction Co. and is waiting for more information.

Experts from Major Geo-Thermal and ME Engineering recommended the purchase of two boilers to add to the system. The boilers would only be used on an as-needed basis.

Estimated cost would be $130,000 for the boilers, $15,000 for the engineering, and $5,000 for the piping. Wangeman recommended the use of ME Engineering for the installation and that the proposal be approved immediately.

In the discussion that followed, it was determined that a factor in the failure of parts of the system was that it was installed during a very cold winter and this could have affected the welding joints.

Board Secretary Matthew Clawson asked whether this is a permanent back-up plan and whether the district’s insurance carrier had been notified. He also asked whether there might be a less expensive solution. Wangeman responded that this was the most adequate solution, as it could carry 65 percent of the total load.

Wangeman also pointed out that the cost of gas for heating and cooling Lewis-Palmer High School is $8,000 per year when the cost for Palmer Ridge is $5,800. It is likely that the boilers will only be on when the temperature falls below zero outside.

Director Sarah Sampayo asked whether there is glycol in the wells and whether it will affect the groundwater nearby. The engineers said that there is glycol and it may be going out into the area but it is food-grade glycol.

Sampayo asked whether the district had applied for reimbursement for the faulty system. Wangeman responded that the company that installed the system and the bonders are on notification.

Wangeman also said that the budget each year includes $150,000 for use in such emergencies.

Board President Mark Pfloff recommended that the issue be passed, as the savings in the cost of heating and cooling over the years far exceeds the cost of the repair.

The issue passed unanimously.

Monument Hill Kiwanis makes grants to district

Ted Bauman, executive director of the Monument Hill Kiwanis Foundation, said that the organization had granted the district $17,840 to fund eight projects in the district. With them are recipients of the funding. Photo by Harriet Halbig.

The next meeting will be on Thursday, Nov. 10 at the Monument Academy library at 1150 Village Ridge Point. The Monument Academy usually meets at 6 p.m. on the second Thursday of each month. Information on the MA School Leadership, including schedule, minutes, committees, and finances can be found at http://www.monumentacademy.net/school-board.

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