



Tony Mann, Superintendent

December 1, 2023

Update: Middle School Heating Issue

Dear Community,

We want to update everyone on the situation with school heat at MRMS. In the spirit of transparency, I'd like to provide you with a full timeline of events and details. We are looking forward to having students back in class next week.

Timeline

1. On Monday night, steam began releasing from a steam vent line because a "steam trap" had failed. This is part of a safety feature which is built into the design of boiler heating systems like ours which was built prior to 1950 and sits central to the campus.

(Note: Boiler water is used to the school. Steam begins traveling into the system at 240 degrees F & 5 psi . The steam eventually turns from vapor to liquid. Steam traps collect the condensate at 180 degrees F and return it to the boiler which heats the entire school.)

- 2. With over-night and early morning temperatures in the mid-30s, thick steam rose above the school. Some thought it even looked like smoke.
- 3. Early Tuesday morning, together with local contractor experts, the MRSD facilities supervisor and team worked quickly to assess the situation. Their priorities were clear: (1) safety and (2) solving the problem.
- 4. The team determined the solution required isolating the affected area. They also determined this could be done in a way that safely kept most all of the building heated. Thus, school proceed on schedule as the issue was resolved.
- 5. On Wednesday afternoon at approximately 3:30 pm, an entirely different problem with the system occurred, completely unrelated to the "steam trap" issue on Monday. Shockingly, near-boiling water began spilling from the ceiling over a large area in the main entrance to the building:

(Click here for video)

- 6. The team, working urgently via video consultation with a local boiler contractor, spent the next 3.5 hours assessing problem before the decision was made to close school the next day. It would not be possible that evening to determine the root-cause nor solution. Erring on the side of safety remains the school district's top priority. The team prepared to rally early Thursday morning.
- 7. Thursday morning, the team met at 7:00am and, with the help of another local technical expert, determined that additional parts not available in Clackamas County were required to solve the problem.
- 8. The root cause of this new problem was the failure of the leading condensate pumps and their electrical supply. The necessary part was acquired and returned to Molalla for installation. The system was tested for safe operation and heating was restored by the afternoon on Thursday, together with retrofitting the original design in an effort to prevent this kind of thing from happening.
- 9. The boiler technology system heating MRMS was built in 1949. The school district facilities leadership team spends 15-20 hours per week managing and maintaining the vintage boiler system in an effort to maintain safe, warm dry learning environments.

In spite of this kind of daily management and maintenance, the original design of the 1948 system regularly creates to regular temperature fluctuations, with winter classroom temperatures ranging from 50-80 degrees F.

We are proud of our facilities leadership team and grateful for the patience of the community over the last few days as we have worked through these issues. School is scheduled to return to normal operations on Monday, December $4^{\rm th}$.

Respectfully,

Tony Mann

Superintendent