Akron General Medical Center
Community Health Center

ENGINEERING GROUP, INC.

This winter was very cold, but the AGMC Community Health Center kept warm due to a recent boiler upgrade.

The facility, built in 1981, was served by a single cast iron sectional boiler. In 1985 a building addition resulted in (3) three more boilers being installed in the same mechanical room. Both of these heating water plants had independent pumping and venting systems, but a portion of "common" piping. This "common" piping with manual shut-off valves allowed the Owner to re-direct water flow to provide minimal heat throughout the entire building in case one of the boiler plants failed.

HEI Engineering Group, Inc. designed a new single boiler plant to serve the entire building which includes (2) 1000MBH high efficiency condensing boilers and (2) two inline pumps that operate in "run"/"stand-by" configuration. The plant is sized so that if a boiler fails on a cold day, the other boiler can automatically maintain 2/3 of the building load. Therefore, the Owner no longer needs to be present to try to maintain heating comfort in the event of a boiler failure.

The large combustion air louver was no longer needed since the new boilers are "direct vent", but a small portion of the original louver is ducted to a new combustion air fan that is inter-locked to operate only when the domestic hot water heater fires. This modification greatly reduced the amount of cold outdoor air infiltration into the mechanical room.

We were also glad to gain floor space for the Owner with the compact footprint of today's high efficiency boilers.