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**April 17, 2021**

## **John Muir High School -- HVAC & VENTILATION ASSESSMENT**

EMCOR Services Mesa Energy Systems, and our team of experts (engineers, technicians, directors, managers and other building systems professionals) have provided assessment and improvement services in order to verify and improve HVAC systems, which includes ventilation systems, as part of PUSD's preparation for safe reopening of schools next week.

### **Results**

The overall result was that systems are in acceptable order for reopening **April 20, 2021**, under reduced occupancy. For reduced occupancy and this first phase of reopening, is recommended that, as long as temperatures remain comfortable and as long as there are no security concerns, that the windows may be opened to increase or supplement the amount of ventilation air to each space.

In preparation for the next phase, we have recommendations for repairs that are required to reach higher levels of ventilation required for full occupancy (planned for Fall). PUSD and EMCOR will work to ensure that repairs are made, and outside air requirements reached and verified as spaces are more and more occupied to full capacity.

The detailed results for **John Muir High School** are as follows:

**Air Quality: 70 classrooms and offices** assessed on **April 13-17, 2021**.

- Findings:
  - Number of classrooms/areas that passed: **59**
  - Number of classrooms that passed with modifications: **11**
    - Modifications necessary
      - Utilize windows and doors (for immediate/reduced occupancy); All rooms that need repairs have operable windows and the district has been notified of the rooms. All rooms will pass with these modifications.

**Mechanical – 133 units** assessed on **April 13-17, 2021**.

- Findings: **17** units required short-term repairs
- Recommendations
  - Short-term
    - The 17 mechanical repairs will be discussed with the district and proposed accordingly. These are not deemed critical for occupancy at this time.
  - Long-term
    - Recommend the district continue performing preventative maintenance at normal intervals. This will include filter changes, belt replacements, and overall quality control as needed.

Thank You,  
Jason Rivadeneyra, General Foreman  
EMCOR Services Mesa Energy Systems

