Sustainable Buildings Panel
O&M Lessons Learned

Emergency Operations Center (EOC) – LEED Gold

Building Description

• Approx 80,000 sq.ft. hardened facility
• Combined Fire, Security, EMCS and Medical Clinic

Discussion Topics

• Pervious Pavement
• Waterless Urinals
• Additional Temp, RH, CO2 and Occupancy Sensors
• Dedicated Outdoor Air System
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Pervious Pavement

• Sustainable Sites – Storm Water Management
• Purpose – Reduce pollutant loading into streams, treatment plants, etc.
• Issue – Subsurface soil condition prevented storm water from draining into ground
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Waterless Urinals

• Water Efficiency – Water Use Reduction
• Purpose – Reduce burden on water supply and treatment systems
• Issue – Lack of maintenance knowledge & cartridge replacement
• Train custodial staff & modify procurement plans
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Additional Sensors

• Energy & Atmosphere – M&V, Optimize Energy Performance
• Indoor Environmental Quality - CO2 Monitoring, Controllability of Systems, Thermal Comfort
• Purpose – Reduce energy usage, increase occupant comfort
• Issue – Occupancy, RH, CO2 and additional temperature sensors require calibration
• Update Maximo maintenance task sheets to include additional calibration
• Update maintenance budget
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**Dedicated Outdoor Air System**

- Indoor Environmental Quality – Minimum IAQ Performance
- Purpose – Increase occupant comfort
- Issue – DOAS adds air handler and controls
- Update Maximo maintenance task sheets to include additional equipment maintenance & sensor calibration
- Update maintenance budget
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Summary

• Equipment used in sustainable buildings can require different maintenance than typical systems
• Added maintenance costs should be fraction of energy savings and increased employee productivity
• Have O&M System Engineers involved in design reviews to help identify any unique maintenance requirements
• Include additional training requirements in project specifications
• Update Maximo to include additional unique requirements
• As we create more sustainable facilities, O&M staff will become more familiar with added requirements