NYSERDA Energy Efficient IAQ Study – Preliminary Report No.1

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07/21/2020  
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ENCLOSED:

- Memorandum  
- Telephone Record  
- Meeting Minutes  
- Field Observations

COMMENTS:

Please find attached progress updates per site as of 7/21 for AKF’s IAQ studies. Please note that the work plans for projects 03 through 05 have not been finalize but will be issued by 7/24.

COPIES TO:

Jeffrey Rios, PE – Partner  
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AKF-WP-01 – 200 Park Avenue

• Progress to date:
  - Analyzed the base building monthly utility data.
  - Requested hourly interval utility data, in the process of analyzing interval trends.
  - Continuous development of the baseline energy model.
  - Verification of the current facility requirements, discussions with the chief building engineer.

• Study findings to date:
  - Building still experiencing limit occupancy. Approximately 300-400 people visit 200 Park Avenue daily. They anticipate occupancy to increase to 500-600.
  - AHU operation has been modified to 6AM-8PM, slightly extended from 6PM shutdown prior to COVID more operation. There is no operation on the weekends because the restaurants are not operating. No mechanical cooling.
  - Sometimes fans operate about 4-5 at 100% OA to provide fresh air, no cooling.
  - Floor-by-floor units already had MERV-14 filters, and high-pressure centralized fans for the perimeter system already had MERV-15.
  - Facility has looked at UVGI technologies, but no strategies have been implemented. Facility is interested in the technology.
  - Floor tenants have reached out to their HVAC vendors to evaluate their supplemental units, filters, cleaning, but no UV technologies yet.
  - There are a few tenant overtime HVAC requests for weekend operation related to tenant IT staff needs to keep move-in schedules on track.

• Lessons learned:
  - Some buildings have been approached by HVAC and lighting contractors to discuss UV technologies already. Useful to request any brochures or documentation already provided to the facility.

• Proposed work plan adjustments:
  - None at the moment.

• Next steps:
  - Continue the development of the energy model baseline.
  - Continue investigation of non-UVGI technologies.
  - Coordinate with the building staff to finalize current system operation and changes related to COVID19 strategies.
AKF-WP-02 – Confidential Commercial Office Building

- Progress to date:
  - Analyzed the base building monthly utility data.
  - Requested hourly interval utility data, in the process of analyzing interval trends.
  - Continuous development of the baseline energy model.
  - Verification of the current facility requirements, discussions with the chief building engineer.

- Study findings to date:
  - Building still experiencing limit occupancy, only floors 8 through 10 are occupied. No expected to change in the near future. A total occupancy of approximately 120 people, less than 5% of the typical occupancy.
  - All AHUs are tenant controlled and are following normal operating schedules.
  - Facility has been approached by HVAC contractors regarding UV technologies. They have recommended cleaning condenser coils.
  - There are only MERV 8 filters present for the base building floor-by-floor air handling units that cannot be improved due to physical limitations.
  - There are a number of floors with AHUs running in curtailment mode of operation.
  - Building has prepared a day-1 re-entry plan, will share with AKF.
  - An IAQ and mold assessment in the common areas was conducted in May.
  - An HVAC vendor recommended the UV cleaning of the condensers.

- Lessons learned:
  - Some buildings have been approached by HVAC and lighting contractors to discuss UV technologies already. Useful to request any brochures or documentation already provided to the facility.

- Proposed work plan adjustments:
  - None at the moment.

- Next steps:
  - Continue the development of the energy model baseline.
  - Continue investigation of non-UVGI technologies.
  - Coordinate with the building staff to finalize current system operation and changes related to COVID19 strategies.