



## Summary of Results:

Penn Station, located at 2230 Stafford Road, Plainfield, IN where the primary concern was hood capture issues.

### **As Found Conditions.**

Table 1 of this report reveals multiple issues with under performing HVAC units, negative airflows infiltrating into the space, and hood capture issues. The latter was the major point of focus for our scope of work.

In general, we found the RTU's and MUA's in need of preventative maintenance. For example, the measured MUA was 667cfm with the inlet filters in, with the filters removed we obtained 1086 cfm (nearly design). The filters when cleaned will have a negligible impact on the airflow. The same was true of the outdoor air mesh filters on each RTU. The maintenance issues extend to the coil filters and coil themselves which we believe were creating some resistance to airflow. Proper cleaning of these coils is necessary to recover the airflow necessary to properly condition this space. The supplied airflow is just 49% of the total rated flow of the combined units. This should be no lower than 90% of their rated flow.

To resolve the hood performance issues we were able to determine the setup of the hood to appliance for the oven was not in proper alignment and required greater exhaust to fully capture the heat and odor. There is a gap between the oven and hood that depreciates the hoods capture efficiency at the intended design rates. We suggest placing trim to cover this area on both ends where the hood and oven meet to allow the hoods to be slowed to original design levels.

The griddle hood was adversely affected by the supply diffuser near the wall, and rear of these same hoods. We suggest balancing the airflow to this diffuser once all HVAC systems are cleaned and able to be speed up to their required design ratings, to not negatively impact hood performance.

The griddle hood exhaust fan is operating below design and will need the fan to be evaluated for replacement or repair to get the proper airflow to this fan to allow the hood to perform at 100% capture and containment.

During our evaluation we attempt to improve the initial, as found, conditions so that we can achieve the desired goals. Due to the poor preventative maintenance and possible issue with the griddle fan, we are unable to manage the goal in one trip. Our tech worked with the surrounding conditions to assist and improve some of the capture problems but in our assessment, it has not been completely resolved.