## INTERPRETATION IC 62.1-2016-4 OF ANSI/ASHRAE STANDARD 62.1-2016 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

Approved: January 21, 2018

**<u>Request from:</u>** Jessica Yablecki, Arup, 2 Bloor St East 24<sup>th</sup> Floor, Toronto, Ontario M4W 1A8.

**<u>Reference</u>**: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 62.1-2016, Section 6.2.2.1 and Table 6.2.2.1, regarding the minimum ventilation rates in the breathing zone.

**Background:** Table 6.2.2.1 does not include rates for maintenance facilities for electric vehicles. General Note 6 indicates that, for unlisted occupancies, "requirements for the listed occupancy category that is most similar in terms of occupant density, activities, and building construction shall be used".

For electric vehicle repair facilities, occupant densities range from  $5-10\#/100 \text{ m}^2$ . Activities in the space consist of cleaning and general maintenance of electric trains including brake work, engine work, light machining, train washing and general degreasing. The maintenance activities will include the use of different chemicals including washer fluid and lubricating oils, but storage of all chemicals is separate to the maintenance facility. No combustion vehicles or combustion equipment will be present in the facility.

**Interpretation:** For maintenance facilities for electric vehicles, designers should select similar occupancies to determine  $V_{bz}$  in Section 6.2.2.1 Minimum Ventilation Rates in Breathing Zone of the ventilation rate procedure. Based on this, an  $R_p$  value of 5 L/s•person and  $R_a$  value of 0.9 L/s•m<sup>2</sup>, similar to General Manufacturing would be applicable.

**Question:** Is this interpretation correct?

Answer: Yes. The requirements of auto repair rooms in Table 6.5 would also apply.