

# Electric vehicle charging stations

As electric vehicles become more available and popular, there are certain hazards that must be controlled when designing and maintaining the charging site. The following are some basic considerations in the design and operation of these charging sites

- As vehicle batteries charge, thermal runaway can potentially occur, which produces hydrogen gas. We must provide adequate airflow and ventilation in the charging area (or move charging outdoors) and eliminate any ignition sources near the charging stations.
- Charging can be a dangerous fire hazard, so adequate distance from any outdoor structure is advisable.
- Charging stations should be in a designated “safe” area away from any ignition sources and accidental vehicle strikes/traffic. There must be adequate egress from the charging area, adequate distance from structures, and emergency shut-offs must be clearly identified.

