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SAFE OPERATING PROCEDURES

Electric Vehicle Charging

SOP 11B-89

Hazard Review		
Electric Shock if Equipment Failure	Fire	
Required Personal Protective Equipment (PPE) (Based on job specific hazard review)		
None Required		

1. Follow manufacturer’s guidelines when charging your vehicle. Check with your local dealer if you need additional information.
2. Make sure your charging device has been certified by a Nationally Recognized Testing Laboratory.
3. Only use manufacturer-provided or approved charging cables. Never use an adapter to change charging types.
4. Charging types vary based on the amount of electricity used and how fast they charge.
 - a. Level 1 utilizing a standard 120 volt AC receptable is the slowest way to charge an Electric Vehicle providing 3 – 5 miles range per hour of charge. It is recommended to use a dedicated circuit to avoid overloading.
 - b. Level 2 utilizes 208/240 volt AC charging which is the most commonly used way to charge an Electric Vehicle providing 12 – 80 miles range per hour of charge. This is best option for home charging.
 - c. Level 3 utilized 400 – 900 volt DC charging providing the fastest charge range of 3 -20 miles per minute. These units require considerable power and are usually found at public charging stations.
5. Install a residual current device with the charging unit. It will turn off the power if a fault is detected and help prevent a fire.
6. Never use an extension cord or multiplug adapter when charging vehicles.
7. Maintain the components of your charging station according to the manufacturer’s maintenance guidelines. Signs of excessive wear may indicate a potential shock hazard. Never use an EV charger with obvious signs of damage.
8. Cover the EV charging station outlet to stop water from entering. Check the manufacturer’s guidelines to make sure it is safe to charge your EV in wet conditions.

Related SOP’s	
General SOP’s.	Chapter 10