CITY OF MERCER ISLAND

Fire Marshal's Office
3030 78th Ave SE | MERCER ISLAND, WA 98040
PHONE: 206.275.7966 | www.mercerisland.gov

STATIONARY STORAGE BATTERY SYSTEMS

Project Type:	
Project Address:	
Contact Name:	**Phone No.**
Owner Name:	

1. Battery System

☐ The battery system has an electrolyte capacity of more than 50 gallons (189 L) for flooded lead-acid, nickel cadmium (Ni-Cd) and value-regulated lead-acid (VRLA)

Specify # of Gallons _____

☐ The battery system has more than 1,000 pounds (454 kg) for lithium-ion and lithium metal polymer.

Specify # of Pounds _____

2. Battery Classification (Total for building or control area)

☐ Nonrecombinant Vented Lead Acid- kWh? _____
☐ Nonrecombinant Vented Nickel-Cadmium- kWh? _____
☐ Recombinant Value Regulated Lead Acid Cells- kWh? _____
☐ Recombinant Valve Regulated Lithium-Ion Cells kWh? _____
☐ Lithium Metal Cells kWh? _____

3. Current Fire Protection Systems (Check all that apply)

☐ NFPA 72 Monitored Fire Alarm System
 • Monitoring Center/Central Station? _____
☐ NFPA 704 Placarding
☐ Knox Box for Fire Department Access
☐ Fire Sprinkler System
☐ Neutralization Product and Quantity

4. Permits Required (*fire code requirements are referenced in the table on the following page*)

- Battery System Permit
- Fire Alarm Permit

BATTERY TECHNOLOGY	MAXIMUM ALLOWABLE QUANTITIES[a]	GROUP H OCCUPANCY
Flow batteries[b]	600 kWh	Group H-2
Lead acid, all types	Unlimited	Not Applicable
Lithium, all types	600 kWh	Group H-2
Nickel cadmium (Ni-Cd)	Unlimited	Not Applicable
Sodium, all types	600 kWh	Group H-2
Other battery technologies	200 kWh	Group H-2[c]

TABLE 608.1
BATTERY REQUIREMENTS

REQUIREMENT	NONRECOMBINANT BATTERIES		RECOMBINANT BATTERIES		OTHER BATTERIES
	Vented (Flooded) Lead Acid Batteries	Vented (Flooded) Nickel-Cadmium (Ni-Cd) Batteries	Valve Regulated Lead-Acid (VRLA) Cells	Lithium-Ion Cells	Lithium Metal Cells
Safety caps	Venting caps (608.2.1)	Venting caps (608.2.1)	Self-resealing flame-arresting caps (608.2.2)	No caps	No caps
Thermal runaway management	Not required	Not required	Required (608.3)	Not required	Required (608.3)
Spill control	Required (608.5)	Required (608.5)	Not required	Not required	Not required
Neutralization	Required (608.5.1)	Required (608.5.1)	Required (608.5.2)	Not required	Not required
Ventilation	Required (608.6.1; 608.6.2)	Required (608.6.1; 608.6.2)	Required (608.6.1; 608.6.2)	Not required	Not required
Signage	Required (608.7)	Required (608.7)	Required (608.7)	Required (608.7)	Required (608.7)
Seismic protection	Required (608.8)	Required (608.8)	Required (608.8)	Required (608.8)	Required (608.8)
Smoke detection	Required (608.9)	Required (608.9)	Required (608.9)	Required (608.9)	Required (608.9)