## 2022 Emergency Power Supply Systems - Generators Reminder List

## **Applicable Codes and Standards**

CBC 2022, CEC 2022, CMC 2022, CFC 2022 NFPA 30 2021, NFPA 37 2018, NFPA 55 2020, NFPA 99 2021, NFPA 110 2019, NFPA 704 2017

## I. Scope

		1.	Emergency and standby power systems required by the California Building Code or the California Fire Code shall be installed in accordance with the California Fire Code, the California Electrical Code, NFPA 110 and NFPA 111.	CBC, Sec. 2702.1.3
		2.	Permanently installed on-site generator sets for health care facilities shall be tested in accordance with NFPA 110, Standard for Emergency and Standby Power Systems, Section 7.13, Installation Acceptance.	CEC Sec. 700.3(A)
		3.	When EPSSs are installed in health care facilities, the installation of distribution and wiring systems shall also be in compliance with CBC Ch. 27, CEC Article 517 and NFPA 99, Health Care Facilities Code.	CBC Sec. 407.11 & NFPA 110, Sec. 7.12.2
		4.	Prevention, control and mitigation of dangerous conditions related to storage, use, dispensing, mixing and handling of flammable and combustible liquids shall be in accordance with California Fire Code Chapter 50 and Chapter 57.	CFC Secs. 5701.1
		5.	Flammable and combustible liquids shall not be placed, stored or handled in any occupancy within the scope of California Code of Regulations, Title 19, Division 1 regulations, except as provided in the California Fire Code.	CCR, Title 19, Div. 1, Sec. 3.15
<u>СНК</u>	<u>N/A</u>	١١.	Generator Location	
		1.	Level 1 emergency power supply to be separated from the remainder of the building by a 2-hr Fire Barrier. This is a minimum Level 1 requirement. Locations must also comply with the separation requirements of CBC, Section 508 and CBC Section 442.2.	NFPA 110, Sec. 7.2.1.1
			Exterior openings shall be protected below or within 10' of building openings.	CBC, Sec. 442.2.2
		3.	Interior openings in engine room not permitted in a building containing a Group I occupancy.	CBC, Sec. 442.2.2.1
		4.	Generators shall not be located in a room or area used for any other purpose other than equipment and controls related to the generation and distribution of emergency power.	CBC, Sec. 442.2.3
		5.	Location classified as a Group F-1 when quantity of diesel fuel storage located inside a building does not exceed the limits of CFC Sec. 605.4.2.2 for Class II combustible liquids.	CBC, Sec. 306.2
		6.	Location classified as a Group H-3 when quantity exceeds limits of CFC Sec. 605.4.2.2 and CBC, Table 307.1(1) or CFC, Table 5003.1.1(1) for Class II combustible liquids. The minimum separation shall be 2-hours in accordance with CBC Table 508.4.	CBC, Sec. 307.1 & CFC 605.4.2.2
		7.	Generator locations shall be separated by fire barriers in accordance with CBC, Table 508.4 for a Group F-1. The minimum separation for a combustion engine shall be a 3-hour fire barrier when separated from a Group I.	CBC, Table 508.4, Footnote g
		8.	Engines situated to be accessible for maintenance, repair and fire fighting.	NFPA 37, Sec. 4.1.1.1
		9.	Detached structures shall be of noncombustible or fire-resistive construction and located 5' min from building openings and combustible construction or at least one of the exposed walls shall be 1-hour fire resistance rated or the detached structure shall be protected by fire sprinklers.	NFPA 37, Sec. 4.1.2.2.1 & Sec. 4.1.2.2.2
		10.	Detached structures shall have ventilation to prevent the accumulation of flammable vapors or gases.	NFPA 37, Sec. 4.1.2.2.3
		11.	Engines, and their weatherproof housings, installed on roofs shall be located at least 5 ft. from openings and from structures having combustible walls or adjacent construction shall be 1-hour resistance rated or the weatherproof enclosure shall be designed to contain a fire.	NFPA 37, Sec. 4.1.3.1
		12.	Roof installation shall have an oil containment system consisting of a curb or dike having a capacity the greater of the fuel system or oil system	NFPA 37, Sec. 4.1.3.2

СПК	NI/A	п	Generator Location (Continued)	
<u>СНК</u>	<u>N/A</u>		Roof surface below engine and beyond the engine and the dike or curb shall be	NFPA 37, Sec. 4.1.3.3
		14	noncombustible to a minimum distance of 12". Engines, and their weatherproof housings, installed outdoors shall be located at	NFPA 37, Sec. 4.1.4
		14.	least 5 ft. from building openings and combustible walls or adjacent construction shall be 1-hour resistance rated or the weatherproof enclosure shall be designed to contain a fire.	NI FA 37, 360. 4.1.4
		15.	Adequate air to be provided for cooling, ventilation and to replenish engine combustion air.	NFPA 37, Sec. 4.1.1.2 & NFPA 110, Sec. 7.7.2
		16.	Level 1 systems shall have supply and discharge air directly to the exterior or through a 2-hr fire rated transfer system without dampers.	NFPA 110, Secs. 7.7.2.1, 7.7.2.2, 7.7.2.3 & 7.7.3
		17.	Provisions shall be made to maintain generator room not to exceed maximum ambient air temperature required by the EPS manufacturer.	NFPA 110, Sec. 7.7.1
		18.	When sprinklered, .3 gpm/2500 sq. ft. most remote area density w/100 sqft. max sprinkler spacing required.	NFPA 37 Sec. 11.4.5.1 & 11.4.5.1.1
		19.	Indoor storage areas and storage buildings shall be provided with mechanical exhaust ventilation or natural ventilation where natural ventilation can be shown to be acceptable for the materials as stored.	CFC, Sec. 5004.3
			Exhaust ventilation systems shall comply with CFC, Section 5004.3.1.	CFC, Sec. 5004.3.1
		21.	The minimum horizontal separation between an LP-gas container >125 gals. and a Class I, II or IIIA liquid storage tank >660 gals.shall be 20 feet.	NFPA 30, Sec. 22.4.2.6
<u>снк</u>	N/A	III.	Generator Installation	
		1.	No combustible materials permitted in room.	Title 19, Sec. 3.19(f), NFPA 37, Sec. 4.1.1.3 & NFPA 110, Sec. 7.11.1
		2.	Sprinkler protection required when maximum allowable quantity of fuel storage exceeds 660 gals. for Class II flammable liquid.	CFC, Sec. 605.4.2.2
		3.	Protected by fire sprinklers if Group H-3.	CFC, Sec. 5705.3.7.3
		4.	Remote manual stop station of a type to prevent inadvertent or unintentional operation located outside the room housing the prime mover, where so installed, or outside the enclosure where the prime mover is located outside the building.	NFPA 110, Secs. 5.6.5.6 & 5.6.5.6.1
		5.	EPS shall be heated as necessary to maintain water jacket and battery temperature required by manufacturer for cold start and load acceptance.	NFPA 110, Sec. 5.3.1
			The ambient air temperature in the EPS equipment room or outdoor housing containing Level I rotating equipment shall be not less than 40°F.	NFPA 110, Sec. 5.3.5
		7.	Annunciation of alarms at generator location and a remote location on-site or off site.	NFPA 110, Secs. 5.6.6.2 (1) & 5.6.6.3
		8.	Remote annunciation at regular work station of operating personnel.	NFPA 99 - 2021, Secs. 6.7.1.2.7.1 &
		9.	Remote audible & visible alarm at constantly monitored location.	6.7.1.2.7.2(A)-(I) NFPA 99 - 2021, Secs. 6.7.1.2.7.1 &
		10.	Battery charger operated by the prime mover shall be provided for Level 1	6.7.1.2.7.2(A)-(I) NFPA 110, Sec.
		11.	generators Automatic battery charger provided.	5.6.3.6 NFPA 110, Sec.
		12.	Level 1 control panel provided at generator.	5.6.4.6 NFPA 110, Sec.
		13.	Normal power service equipment not permitted in generator room where service equipment is >150 volts or $\ge$ 1000 amperes.	5.6.5.1 NFPA 110, Sec. 7.2.3
		14.	No other equipment, except those that serve the space, shall be permitted in the EPS room or EPS enclosure.	NFPA 110, Sec. 7.2.1.3 & Sec. 7.2.2.3

<u>СНК</u>	N/A	III.	Generator Installation (Continued)	
		15.	Equipment located to minimize damage resulting from vandalism, tampering, or sabotage.	NFPA 110, Sec. 7.1.2
		16.	Generators shall have a minimum clearance of 3 ft. on all sides readily accessible for repair, maintenance, cleaning, or replacement.	NFPA 110, Sec. 7.9.12.1
		17.	Flexible connections between radiator and air ducts for cooling system provided.	NFPA 110, Sec. 7.8.2
		18.	Flexible electrical conduit connections provided.	NFPA 110, Sec. 7.12.3
<u>снк</u>	N/A	IV.	Generator Fuel Supply	
		1.	Minimum fuel supply of 24 hrs. full-demand operation for acute care hospital. (Min 72 hrs. for NPC-5)	CEC 700- 12(D)(2)Exc.1
Γ		2.	Minimum fuel supply of 6 hrs. full-demand operation for SNF, Psych, ICF.	CEC 700- 12(D)(2)Exc.2
		3.	Minimum fuel supply of 4 hrs. full-demand operation for ambulatory surgery clinics.	CEC 700- 12(D)(2)Exc.3
		4.	For facilities subject to Centers for Medicare & Medicaid Services (CMS) regulations, see 42 CFR 482.15(e)(3) and 42 CFR 483.73(e)(3) for emergency generator fuel requirements.	CEC 700-12(D)(2)
		5.	See OSHPD CAN 2-108 for temporary generator fuel supplies.	CBC Sec. 108
		6.		NFPA 37, Sec. 6.9
		7.		NFPA 110, Sec. 5.5.1 & Sec. 5.5.1.1
			Main fuel tank(s) shall be sized to accommodate 133% of the specific EPS class.	NFPA 110, Sec. 5.5.3
			Low-fuel sensing switch required for the main fuel supply tank(s) when less than the minimum fuel required for the specific EPS class remains in the tank(s).	NFPA 110, Sec. 5.5.2
			Low fuel annunciation at a generator location and a remote location on-site or off- site.	NFPA 110, Sec. 5.6.6.2(1)
			Low fuel annunciation at a constantly monitored location. Low fuel annunciation at regular work station of operating personnel.	NFPA 99 - 2021, Secs. 6.7.1.2.7.1 & 6.7.1.2.7.2(A)-(I) NFPA 99 - 2021, Secs. 6.7.1.2.7.1 &
				6.7.1.2.7.2(A)-(I)
CHK	N/A		Generator Fuel Supply/Return Piping	
		1.	Provisions shall be made for pressure testing of piping.	CFC, Sec. 5703.6.3
			Protected from corrosion and galvanic action.	CFC, Sec. 5703.6.5
			Protected from vehicle damage by guard posts or other approved means in accordance with CFC Sec. 312.	CFC, Sec. 5703.6.4
			Supports protected by draining liquids away, 2-hr fire rating, or other approved means.	CFC, Sec. 5703.6.8
			Approved metallic or nonmetallic flex connectors permitted to protect the piping.	NFPA 37, Sec. 6.8.2.1
			Valves shall be provided to control normal flow and shut off flow for breaks	NFPA 37, Sec. 6.8.3
		_	Fuel piping shall be of compatible metal to minimize electrolysis and be properly sized.	NFPA 110, Sec. 7.9.3
		8.		NFPA 110, Sec. 7.9.3.1
			Approved flexible fuel lines shall be used between the prime mover and the fuel piping.	NFPA 110, Sec. 7.9.3.2
			Fuel line solenoids shall be battery powered.	NFPA 110, Sec. 7.9.9 & Sec. 5.6.3.2.1
			EPS piping shall be designed to minimize damage from earthquakes.	NFPA 110, Sec. 7.11.5
			Gravity return fuel lines between the day tank and main supply tank shall be free of traps to flow freely to the main tank.	NFPA 110, Sec. 7.9.4.2
			Liquid fuel shall feed to engines by pumps.	NFPA 37, Sec. 6.9
		14.	Spill control, drainage control & secondary containment not required for piping connected to systems. See ASME B31.1, ANSI/ASME B31.3 or ASME B31.4	NFPA 30, Sec. 27.3.1.2

<u>СНК</u>	<u>N/A</u>	VI.	Generator Day Tanks	
		1.	Day tank required when fuel pump lift (suction head) is not adequate.	NFPA 110, Sec. 7.9.2
		2.	Day tank required if the engine manufacturer's fuel pump static head pressure limits are exceeded when the level of fuel in the tank is at maximum.	NFPA 110, Sec. 7.9.2.1
		3.	Spill control required when any individual vessel exceeds 60 gal. or the aggregate capacity exceeds 1,000 gals and secondary containment is not provided.	CFC, Sec. 605.4.2.7
		4.	Listed generator subbase secondary containment fuel tanks of (660 gal) capacity and below shall be permitted to be installed outdoors or indoors without diking or remote impounding.	NFPA 110, Sec. 7.9.12
		5.	Monitoring of secondary containment of tanks located indoors required. An approved monitoring method shall be provided to detect hazardous materials in the secondary containment system.	CFC, Secs. 605.4 #3 & #4, 5004.2.2.5,
			Diesel day tanks shall be installed below the engine fuel return elevation. Return line to day tank shall be below the fuel return elevation.	NFPA 110, Sec. 7.9.4 NFPA 110, Sec. 7.9.4.1
			Drainage control or diking required for aboveground tanks located outside. Drainage control or diking not required for listed secondary containment aboveground tanks located outside.	CFC, 5704.2.10 CFC, Sec. 5704.2.10, Exc. 2
		10.	Shall not be located near or be allowed to obstruct an egress route.	CFC, Sec. 5704.3.3.3 & NFPA 30 Sec. 24.5.1
			Sprinkler protection required when maximum allowable quantity of indoor fuel storage exceeds 660 gals. Class II flammable liquid.	CFC, Sec. 605.4.2.2
			Protected by fire sprinklers if Group H-3. Spill control and secondary containment when tank located inside structure or roof	CFC, Sec. 5705.3.7.3 NFPA 37, Sec.
			of structure.	6.3.2.4 & Sec. 6.3.4.2
		14.	Fuel tanks supplied by pumps shall have (1) overflow line piped to source tank, (2) high level alarm and (3) high-level automatic shutoff.	NFPA 37, Sec. 6.5.4
		15.	Filling, emptying and vapor recovery connections shall be located outside no less than 5 ft. from building openings or lot lines of property that can be built on.	CFC, Sec. 5704.2.7.5.2 & NFPA 30, Sec. 22.13.4.1
		16.	Signs prohibiting open flames and smoking.	CFC, Sec. 308.1.1 & 310.3
			Signage in accordance with NFPA 704 >100 gal. capacity. Piping, connections, fittings and other appurtenances shall be installed in accordance with ASME B31.	CFC, Sec. 5704.2.3.2 NFPA 30, Sec. 27.3.1.2
<u>CHK</u>	N/A	VII.	Integral Tanks	
		1.	Liquid storage room/warehouse required when maximum allowable quantity exceeded.	CFC, Sec. 5704.3.4.3 & Table 5003.1.1(1)
			Liquid storage room (H-3) >1000 sq. ft. must have at least 25% of perimeter on an exterior wall.	CBC, Sec. 415.6
		3.	Liquid storage room must be separated from adjacent occupancies as required for H-3 occupancies.	CBC, Sec. 508.4.4 & Table 508.4
		4.	The design of the supporting structure shall be in accordance with CBC and NFPA 30.	CFC, Sec. 5704.2.7.7
		5.	Horizontal cylindrical and rectangular tanks shall not exceed a gauge pressure of 1 psi and shall be limited to 2.5 psi under emergency conditions.	NFPA 30, Sec. 21.4.2.1.5
		6.	Tanks inside buildings required to have means to prevent overflow into the building.	CFC, Sec. 5704.2.9.5.1 & NFPA 30 Sec. 24.14.8
		7.	Fabrication & construction of tanks complies with NFPA 30, Chapters 21, 22 & 23.	CFC, Sec. 5704.2.7
		8.	Spill control required when any individual vessel exceeds 60 gal. or the aggregate capacity exceeds 1,000 gals.	CFC, Sec. 605.4.2.7
		9.	Listed generator subbase secondary containment fuel tanks of (660 gal) capacity and below shall be permitted to be installed outdoors or indoors without diking or remote impounding.	NFPA 110, Sec. 7.9.12

<u>СНК</u>	N/A	VII.	Integral Tanks (Continued)	
			Monitoring of secondary containment of tanks located indoors required.	CFC, Sec. 5004.2.2.5
			Drainage control or diking required for aboveground tanks located outside.	CFC, 5704.2.10
			Drainage control or diking not required for listed secondary containment aboveground tanks located outside.	CFC, Sec. 5704.2.10, Exc. 2
		13.	Location of tanks with a capacity >660 gals.distance to property lines, public ways and important buildings shall be in accordance NFPA 30, Chapter 22 & Table 22.4.1.1(a).	CFC, Sec. 605.4.1
		14.	Tank, tank vent and tank filler locations in accordance with NFPA 55, Table 9.3.2.	NFPA 55, Sec. 9.3.2
		15.	Shall not be located near or be allowed to obstruct an egress route.	CFC, Sec. 5704.3.3.3 & NFPA 30, Sec. 24.5.1
		16.	Sprinkler protection required when maximum allowable quantity of fuel storage exceeds 660 gals. Class II flammable liquid.	CFC, Sec. 605.4.2.2
		17.	Protected by fire sprinklers if Group H-3.	CFC, Sec. 5705.3.7.3
		18.	Spill control and secondary containment when tank located inside structure or roof of structure.	NFPA 37, Sec. 6.3.2.4 & Sec. 6.3.4.2
		19.	Fuel tanks supplied by pumps shall have (1) overflow line piped to source tank, (2) high level alarm and (3) high-level automatic shutoff.	NFPA 37, Sec. 6.5.4
		20.	Filling, emptying and vapor recovery connections shall be located outside no less than 5 ft. from building openings or lot lines of property that can be built on.	CFC, Sec. 5704.2.7.5.2
		21.	Signs prohibiting open flames and smoking.	CFC, Sec. 308.1.1 & 310.3
		22.	Signage in accordance with NFPA 704 >100 gal. capacity.	CFC, Sec. 5704.2.3.2
		23.	Piping, connections, fittings and other appurtenances shall be installed in accordance with ASME B31.	NFPA 30, Sec. 27.3.1.2
CHK	N/A	VIII	. Tank Venting	
<u>CHK</u> □	<u>N/A</u> □		<b>. Tank Venting</b> The vent pipe shall terminate outside the building at a point at least 5 ft. from any building opening or lot line that can be built on	CFC, Sec. 5704.2.7.3.3
			The vent pipe shall terminate outside the building at a point at least 5 ft. from any building opening or lot line that can be built on	CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3
		1. 2.	The vent pipe shall terminate outside the building at a point at least 5 ft. from any building opening or lot line that can be built on	
		1. 2. 3.	The vent pipe shall terminate outside the building at a point at least 5 ft. from any building opening or lot line that can be built on Piping for venting shall discharge upward or horizontally away from adjacent walls. Vent outlets shall be located so that vapors will not be trapped by eaves or other	CFC, Sec. 5704.2.7.3.3
		1. 2. 3. 4.	The vent pipe shall terminate outside the building at a point at least 5 ft. from any building opening or lot line that can be built on Piping for venting shall discharge upward or horizontally away from adjacent walls. Vent outlets shall be located so that vapors will not be trapped by eaves or other obstructions. Vent outlets shall be located so that vapors will be released at not less than 12 ft. above grade level. Vent piping shall not be manifolded except where required for special purposes	CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3
		1. 2. 3. 4. 5.	The vent pipe shall terminate outside the building at a point at least 5 ft. from any building opening or lot line that can be built on Piping for venting shall discharge upward or horizontally away from adjacent walls. Vent outlets shall be located so that vapors will not be trapped by eaves or other obstructions. Vent outlets shall be located so that vapors will be released at not less than 12 ft. above grade level.	CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3
		1. 2. 3. 4. 5. 6.	The vent pipe shall terminate outside the building at a point at least 5 ft. from any building opening or lot line that can be built on Piping for venting shall discharge upward or horizontally away from adjacent walls. Vent outlets shall be located so that vapors will not be trapped by eaves or other obstructions. Vent outlets shall be located so that vapors will be released at not less than 12 ft. above grade level. Vent piping shall not be manifolded except where required for special purposes such as vapor recovery, vapor conservation or air pollution control. Vent piping protected from vehicle damage by guard posts or other approved means in accordance with CFC Sec. 312.	CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.5 NFPA 30, Sec.
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		1. 2. 3. 4. 5. 6. <b>IX.</b> 1.	The vent pipe shall terminate outside the building at a point at least 5 ft. from any building opening or lot line that can be built on Piping for venting shall discharge upward or horizontally away from adjacent walls. Vent outlets shall be located so that vapors will not be trapped by eaves or other obstructions. Vent outlets shall be located so that vapors will be released at not less than 12 ft. above grade level. Vent piping shall not be manifolded except where required for special purposes such as vapor recovery, vapor conservation or air pollution control. Vent piping protected from vehicle damage by guard posts or other approved means in accordance with CFC Sec. 312.	CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.5 NFPA 30, Sec. 27.8.2.11 CMC, Sec. 407.2.1
		1. 2. 3. 4. 5. 6. <b>IX.</b> 2.	The vent pipe shall terminate outside the building at a point at least 5 ft. from any building opening or lot line that can be built on Piping for venting shall discharge upward or horizontally away from adjacent walls. Vent outlets shall be located so that vapors will not be trapped by eaves or other obstructions. Vent outlets shall be located so that vapors will be released at not less than 12 ft. above grade level. Vent piping shall not be manifolded except where required for special purposes such as vapor recovery, vapor conservation or air pollution control. Vent piping protected from vehicle damage by guard posts or other approved means in accordance with CFC Sec. 312. <b>Generator Exhaust</b> Exhaust shall terminate minimum 25' from ventilation air inlets or windows.	CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.5 NFPA 30, Sec. 27.8.2.11
		1. 2. 3. 4. 5. 6. <b>IX.</b> 2. 3.	The vent pipe shall terminate outside the building at a point at least 5 ft. from any building opening or lot line that can be built on Piping for venting shall discharge upward or horizontally away from adjacent walls. Vent outlets shall be located so that vapors will not be trapped by eaves or other obstructions. Vent outlets shall be located so that vapors will be released at not less than 12 ft. above grade level. Vent piping shall not be manifolded except where required for special purposes such as vapor recovery, vapor conservation or air pollution control. Vent piping protected from vehicle damage by guard posts or other approved means in accordance with CFC Sec. 312. <b>Generator Exhaust</b> Exhaust shall terminate minimum 25' from ventilation air inlets or windows. Exhaust shall terminate not less than 10 ft. above adjoining grade. Exhaust shall terminate not less than 10' from doors, occupied areas or operable	CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.5 NFPA 30, Sec. 27.8.2.11 CMC, Sec. 407.2.1 CMC, Sec. 407.2.2
		1. 2. 3. 4. 5. 6. <b>IX.</b> 1. 2. 3. 4.	The vent pipe shall terminate outside the building at a point at least 5 ft. from any building opening or lot line that can be built on Piping for venting shall discharge upward or horizontally away from adjacent walls. Vent outlets shall be located so that vapors will not be trapped by eaves or other obstructions. Vent outlets shall be located so that vapors will be released at not less than 12 ft. above grade level. Vent piping shall not be manifolded except where required for special purposes such as vapor recovery, vapor conservation or air pollution control. Vent piping protected from vehicle damage by guard posts or other approved means in accordance with CFC Sec. 312. <b>Generator Exhaust</b> Exhaust shall terminate minimum 25' from ventilation air inlets or windows. Exhaust shall terminate not less than 10 ft. above adjoining grade. Exhaust shall terminate not less than 10' from doors, occupied areas or operable windows.	CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.5 NFPA 30, Sec. 27.8.2.11 CMC, Sec. 407.2.1 CMC, Sec. 407.2.2 CMC, Sec. 407.2.2 NFPA 37, Sec. 8.1.5 & NFPA 110, Sec.
		1. 2. 3. 4. 5. 6. <b>IX.</b> 1. 2. 3. 4. 5.	The vent pipe shall terminate outside the building at a point at least 5 ft. from any building opening or lot line that can be built on Piping for venting shall discharge upward or horizontally away from adjacent walls. Vent outlets shall be located so that vapors will not be trapped by eaves or other obstructions. Vent outlets shall be located so that vapors will be released at not less than 12 ft. above grade level. Vent piping shall not be manifolded except where required for special purposes such as vapor recovery, vapor conservation or air pollution control. Vent piping protected from vehicle damage by guard posts or other approved means in accordance with CFC Sec. 312. <b>Generator Exhaust</b> Exhaust shall terminate minimum 25' from ventilation air inlets or windows. Exhaust shall terminate not less than 10 ft. above adjoining grade. Exhaust shall terminate not less than 10' from doors, occupied areas or operable windows. Low points in exhaust systems shall have suitable drains.	CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.5 NFPA 30, Sec. 27.8.2.11 CMC, Sec. 407.2.1 CMC, Sec. 407.2.2 CMC, Sec. 407.2.2 NFPA 37, Sec. 8.1.5 & NFPA 110, Sec. 7.10.3.1
		1. 2. 3. 4. 5. 6. <b>IX.</b> 2. 3. 4. 5. 6.	The vent pipe shall terminate outside the building at a point at least 5 ft. from any building opening or lot line that can be built on Piping for venting shall discharge upward or horizontally away from adjacent walls. Vent outlets shall be located so that vapors will not be trapped by eaves or other obstructions. Vent outlets shall be located so that vapors will be released at not less than 12 ft. above grade level. Vent piping shall not be manifolded except where required for special purposes such as vapor recovery, vapor conservation or air pollution control. Vent piping protected from vehicle damage by guard posts or other approved means in accordance with CFC Sec. 312. <b>Generator Exhaust</b> Exhaust shall terminate minimum 25' from ventilation air inlets or windows. Exhaust shall terminate not less than 10 ft. above adjoining grade. Exhaust shall terminate not less than 10' from doors, occupied areas or operable windows. Low points in exhaust systems shall have suitable drains.	CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.3 CFC, Sec. 5704.2.7.3.5 NFPA 30, Sec. 27.8.2.11 CMC, Sec. 407.2.1 CMC, Sec. 407.2.2 CMC, Sec. 407.2.2 NFPA 37, Sec. 8.1.5 & NFPA 110, Sec. 7.10.3.1 NFPA 37, Sec. 8.2.3.1

<u>СНК</u>	N/A	IX.	Generator Exhaust (Continued)	
			Approved thimble(s) required where <1400° F exhaust passes through combustible walls or partitions.	NFPA 37, Sec. 8.3.3 & NFPA 110, Sec.
		10.	Exhaust pipes >1400° F shall comply with NFPA 211.	7.10.3.4 NFPA 37, Sec. 8.4
			Exhaust piping shall be connected to the prime mover by means of a flexible connector.	NFPA 37, Sec. 8.2.2 & NFPA 110, Sec. 7.10.3
		12.	Exhaust shall be independently supported.	NFPA 110, Sec. 7.10.3
		13.	Exhaust system shall be designed so it does not create excessive backpressure.	NFPA 110, Sec. 7.10.4
		14.	Exhaust shall terminate at a point where hot gases, sparks, or products of combustion will discharge to a safe location.	NFPA 37, Sec. 8.2.3.1
			Exhaust shall terminate with a rain cap, tee, Ell pointing downward or vertically with provisions for trapping and draining rain water and snow melt.	NFPA 110, Sec. 7.10.3.5
		16.	Exhaust systems shall be guarded where necessary to prevent personnel burns.	NFPA 37, Sec. 8.2.4
<u>CHK</u>	N/A		Emergency Power	
			Battery charger for task illumination connected to life safety branch (hospitals).	CEC, Sec. 517-33(E)
		2. 3.	Receptacles at Gen Set connected to life safety branch (hospitals). Generator accessories for performance connected to life safety branch (hospitals)	CEC, Sec. 517-33(E) CEC, Sec. 517-33(F)
		4.		CEC, Sec. 517-43(E)
		5.	Receptacles at Gen Set connected to life safety branch (SNF's).	CEC, Sec. 517-43(E)
		6.	Battery powered emergency lighting required at EPS location.	NFPA 110, Sec. 7.3.1
		7.	Equipment essential to operation of generator (ventilation, fuel oil pumps, etc.) powered by EPS.	NFPA 110, Sec. 7.12.4
<u>CHK</u>	N/A	XI.	Exiting	
			Maximum length of common path of egress travel for Group H-3 spaces with one exit is 25 ft.	CBC, Sec. 1006.2.1 & Table 1006.2.1
		2.	Maximum travel distance for Group H-3 is 150 ft.	CBC, Sec. 1017.2 & Table 1017.2
		3.	Two exits required if Group H-3 with occupant load greater than 3.	CBC, Sec. 1006.2.1 & Table 1006.2.1
			Egress doors swing in direction of egress if Group H.	CBC, Sec. 1010.1.2.1
			Panic hardware or fire exit hardware required if Group H.	CBC, Sec. 1010.2.9
		6.	Maximum length of common path of egress for Group F-1 spaces with one exit; 75 ft. unsprinklered and 100 ft. sprinklered.	CBC, Sec. 1006.2.1 & Table 1006.2.1
		7.		CBC, Sec. 1017.2 & Table 1017.2
		8.	Two exits required if Group F-1 with an occupant load greater than 49.	CBC, Sec. 1006.2.1 & Table 1006.2.1
<u>снк</u>	N/A	XII	Testing	
			Testing shall be in accordance with NFPA 110, Sec. 7.1.3.	CEC, Sec. 700.3(A)
		2.	-	NFPA 110, Sec. 7.13.4.1.1 &
				7.13.4.1.4(10)
		3.	2-hour test with full load.	NFPA 110, Sec. 7.13.4.3
		4.	Cycle crank test.	NFPA 110, Sec. 7.13.4.4
		5.	All safeties required by NFPA 110, Sec. 5.6.5. & 5.6.6.	NFPA 110, Sec. 7.13.4.5

NOTE

Compliance with all items on this list does not necessarily assure compliance with all provisions of the applicable codes and standards. This reminder list should be used only by persons with a comprehensive knowledge of the applicable codes and standards.

OSHPD Policy Intent Notices and Code Application Notices. https://hcai.ca.gov/construction-finance/codes-and-regulations/#PINs https://hcai.ca.gov/construction-finance/codes-and-regulations/#CANs OSHPD Project Review Status https://hcai.ca.gov/construction-finance/resources/project-status-reports/ OSHPD Public Use Forms https://hcai.ca.gov/construction-finance/resources/forms-applications-reminder-lists/#ProjectForms