2.07 Permit Application Checklist for Diesel Generators, Diesel Fire Pumps, and Fuel Tanks Serving Generators and Fire Pumps

(To be printed on the title page (s) of every plan submitted with building permit applications for diesel generators, diesel fire pumps, tanks, and piping, and to be completed by the design engineer for the submittal.)

This checklist has been developed primarily for fuel installations in buildings. Outdoor fuel installations will require further information. This checklist is designed to assist designers, installers, plan reviewers, and field inspectors. This checklist shall be prepared by the design professional and shall be stamped and wet-signed.

This document is not all-inclusive of all requirements for fuel installations, and it is the responsibility of the designer to research the applicable codes. In addition to these requirements, the applicant is advised to contact the San Francisco Department of Public Health at (415) 252-3900 for their requirements as the Hazardous Materials Unified Program Agency. Documents referenced for this bulletin are as follows:

2010 San Francisco Fire Code
2010 California Fire Code
2010 California Building Code
2010 California Mechanical Code

Definitions

**EPS** - Emergency Power Supply System- A complete functioning EPS system coupled to a system of conductors, disconnecting means and over-current protective devices, transfer switches, and all control, supervisory, and, and support devices up to and including the load terminals of the transfer equipment needed for the system to operate as a safe and reliable source of electric power.

**Level 1** - Includes the following: emergency lighting, exit signs, fire alarm, sprinkler alarm, and detection systems, fire pumps where backup power is required, controls for smoke control equipment required by the Building Code, elevator car lighting. Includes all loads classified as Emergency Systems by the NEC.

**Level 2** - Includes elevators requiring emergency power, and could include heating and refrigeration systems, communications systems, ventilation and smoke removal systems (except controls), sewerage disposal, lighting, and industrial processes that, when stopped due to any interruption of the primary electrical supply, could create hazards or hamper rescue or fire-fighting operations. Includes all loads classified as Legally Required Standby by the NEC.

**Tank** - A vessel containing more than 60 gallons.

The stationary emergency and standby generator systems are required to be listed in accordance with UL 2200.

Reference CFC 604.1.1.

STREET ADDRESS OF BUILDING ______________________________________________________________

1. Number of diesel generators under this permit application. ________________________________

2. Number of diesel fire pumps under this application. _______________________________________

3. Number of diesel fuel storage tanks under this application. ________________________________

4. Location(s) of generators or fire pumps under this application:
   ___ In building, floor____________
   ___ On roof
   ___ Detached structure
5. Type of diesel fuel tank
   ___ Aboveground (Atmospheric)
   ___ Underground (Atmospheric)
   ___ Fire Resistant Aboveground Tank (Tank, not building components)(Atmospheric)
   ___ Underground Vault
   ___ Secondary Containment Aboveground Tank Indoors _____ Outdoors _____
   ___ UL Listed UL 2085 Protected Aboveground Tank
   ___ Other Specialty Tank, Please specify ___________________________________________________________

6. Location(s) of diesel fuel storage tanks (include day tanks) under this application.
   ___ In building, floor___________ Number of gallons_________
   ___ On roof. Number of gallons___________________________
   ___ Outdoors. Number of gallons__________________________
   ___ Aboveground_____ Underground

7. Generator or fire pump will be located in a combustible-free room or enclosure
   ___ Yes
   ___ No

8. Air filter is of the type that will not burn freely when exposed to fire
   ___ Yes
   ___ No

9. Explain how sufficient air for combustion, proper cooling, and adequate ventilation is provided for generator or fire
   pump? ___________________________________________________________________________________
   For fuel tank(s)? __________________________________________________________________________

10. Generator or fire pump make, model number, rated capacity, listing agency ________________________________

11. Separate Fire Department permit is required (amount of diesel in building exceeds 25 gallons, or 60 gallons
    outside.) (Reference: 2010 SFFC Section 105.6.16, number 3)
   ___ Yes
   ___ No

12. The aggregate total volume of diesel in the building after this installation will be ________ gallons. (Aggregate
    total in building affects room design for fire rating. 2006 Edition of NFPA 37, 6.3.2.2, 6.3.2.3)

13. Liquid storage room is properly placarded in accordance with NFPA 704 and when located in a high-rise building,
    hazardous material inventory and locations are prominently posted on a permanent placard in the fire control
    room, 2010 SFFC, Sections 2703.5, 2703.6, 3403.5, and 3404.2.3.
14. Generator serves which type of loads as defined by NFPA 110 (See definitions above) Check all applicable boxes:
   ___ Level 1 or Emergency Systems
   ___ Level 2 or Legally Required Standby
   ___ Optional-Base Building loads
   ___ Optional-Tenant Loads

15. If installation serves optional loads, is the intent of the installation to keep the business up and running during a power failure (building occupied)?
   ___ Yes
   ___ No
   ___ n/a

16. Generator/fire pump (circle one) #1 consumes _____________ gallons of diesel per hour under full load.
    Generator/fire pump # 2 consumes ____________ gallons of diesel per hr.
    Generator/fire pump # 3 consumes ____________ gallons of diesel per hr. (Attach additional sheets if necessary.)

17. Starting kVA of the generator is _______________. If more than one generator, attach info.

18. Running kVA of the generator is _______________. If more than one generator, attach info.

19. Provide a list of all equipment served by the generator and demand calculations
   * Attached (minimum 11 x 17 sheet)
   * On plans

ENGINES LOCATED IN STRUCTURES (answer 20-21) if installing an engine inside a structure.)

20. What is the fire rating of the walls and opening protection in the room where the engine is located? Note, minimum one-hour fire barrier separation shall be provided for engines installed in a building. The system shall be designed in such a way that required opening protection is provided without choking off vital combustion air and ventilation.) Reference: 2010 SFBC Section 432.
   ___ 1-hour
   ___ 2-hour
   ___ 3-hour
   Other:___________________

21. Fully Sprinklered building, per NFPA 13?
   ___ Yes
   ___ No
   If no, interior openings are not permitted between the Engine Room and other portions of the building, except I occupancies. Reference 2010 SFBC, Section 432.2.2.1

ENGINES LOCATED ON ROOFS (answer 22-23 if you are installing an engine on a roof.)

___ 22-23 Not applicable

22. Engines, and their weatherproof housings, if provided, that are installed on roof structures shall be located at least (5ft) for structures having combustible walls and wall openings, 2006 Edition of NFPA 37, 4.1.3.1.
A minimum separation shall not be required where the following conditions exist:

(1) The adjacent wall has a rating of at least 1 hour.
(2) The weatherproof enclosure is constructed on noncombustible material, and it has been demonstrated that a fire within the enclosure will not ignite combustible materials outside the enclosure.

Note: Corrosion protection is required for fuel tanks by 2010 SFFC, Section 3404.2.7.9

23. Where engine or skid mounted assembly containing an engine is mounted on a roof, the surface beneath the engine and beyond the engine, and any containment dike is noncombustible to a minimum distance of 12 inches

Reference: 2006 Edition of NFPA 37, Section 1.3.3.

ENGINES LOCATED OUTDOORS (answer 24 if you are installing an engine outdoors) ___ 24 Not applicable

24. Engines and their weatherproof housings are located at least 5 ft. from openings in walls and at least 5 ft. from structures having combustible walls. Reference: 2006 Edition of NFPA 37, Section 4.1.4

___ The adjacent wall has a rating of at least 1 hour.
___ The weatherproof enclosure is constructed on noncombustible material, and it has been demonstrated that a fire within the enclosure will not ignite combustible materials outside the enclosure.

Note: Corrosion protection is required for fuel tanks by 2010 SFFC, Section 3404.2.7.9

ENGINES HANDLING HAZARDOUS MATERIALS (Other than their own fuel supply)

[Answer 25-28 when applicable] ___ 25-28 Not applicable

25. Engine is suitably isolated from areas not having a similar hazard. Reference: 2006 Edition of NFPA 37, Section 4.4.1


27. Rooms containing engines located within structures have interior walls, floors, and ceilings of at least 2-hour fire resistance rating. Reference: 2006 Edition of NFPA 37, Section 4.4.2

28. Rooms containing engines are adequately ventilated from a non-hazardous area. Reference: 2006 Edition of NFPA 37, Section 4.4.2

ENGINE WIRING (Answer 29-31 for all engine installations.)

29. Wiring is in accordance with the 2008 Edition of NFPA 70 and the 2006 Edition of NFPA 37, Section 4.5

30. Are the Electrical circuits are designed to be fail-safe, i.e. Engine shuts down automatically in case of control wire break, disconnect, or cutting. Reference: 2006 Edition of NFPA 37, Section 4.5.3.4:

___ Yes, circuits are fail safe
___ No

31. Batteries, wiring, and electrical protective devices are protected against arcing and accidental shorting.
32. Engine exhaust termination location is ________________________________
   (Required to terminate outside structure at a point where hot gases, sparks, or products of combustion will be
   discharged harmlessly and guarded to prevent personnel burns where necessary). Reference: 2006 Edition of
   NFPA 37, Section 8.2.3.

33. Anticipated engine exhaust temperature_____________. Reference 2006 Edition of
   NFPA 37, Section 8.3 and
   8.4 for clearance requirements

ENGINE REQUIREMENTS (Answer 34-39 for all engine installations).

34. Is Engine provided with an automatic engine speed control, as required? Reference: 2006 Edition of NFPA 37,
   Section 9.1

   ___ Yes
   ___ No

35. Reciprocating engines that are 10 Horsepower or more are provided with:

   * Device for high jacket water temperature or, high cylinder temperature
   * Device for low lubricating oil pressure or, in the case of a splash lubricated engine, for low oil level
   * Provisions for shutting down the engine at the engine and a remote location
   * An automatic engine shutdown device for engine over-speed
   * An automatic engine shutdown device for high-lubricating oil temperature
   * Provisions for shutting down, from a remote location, lubricating oil pumps not driven by the engine.
   Reference:
   2006 Edition of NFPA 37, Section 9.2.1

36. Blank

37. Combustion gas turbine engines are equipped with the item in 34 above, and at least the following additional
   features:

   * An automatic main speed control and overspeed shutdown control
   * A backup overspeed shutdown control that is independent from the main control specified above
   * An automatic engine shutdown device for low lubricating oil pressure
   * An automatic engine shutdown device for high exhaust temperatures
   * Provisions for shutting down the engine from a remote location
   * Provisions for shutting down, from a remote location, lubricating oil pumps not directly driven by the engine
   * An automatic shutdown device for high exhaust temperatures
   * A means of automatically shutting off the fuel supply in the event of a flameout
   * n/a. Reference: 2006 Edition of NFPA 37, Section 9.3

38. One set of operating and maintenance procedures will be located where readily accessible to personnel operating
   or maintaining equipment. Reference: 2006 Edition of NFPA 37, Section 10.1
39. Emergency shutdown procedures will be conspicuously posted near the engine indicating the location of the fuel shutoff valve(s). Reference: 2006 Edition of NFPA 37, Section 10.2

FUEL SUPPLY

FUEL TANKS (Answer 40-78 for all fuel tank installations.)

40. Fuel Tank is listed. Make, model, listing agency ______________________________________________________

____________________________________________________________________________________

41. Tank is constructed of:
   ___ Combustible Materials: as allowed by 2008 Edition of NFPA 30, Section 21.4.1.2 (1 and 2)
   ___ Noncombustible Materials

42. Engine-mounted tanks securely mounted on the engine assembly and protected against vibration, physical damage, engine heat, and the heat of exhaust piping. Reference: 2006 edition of NFPA 37, Section 6.3.1

43. Indoor and roof fuel tanks are securely mounted on substantial noncombustible supports. Reference: 2006 Edition of NFPA 37, Sections 6.3.2.1, and 6.3.4.1

44. Fully Sprinklered Building per NFPA 13 (affects exempt amounts). Reference: 2010 CBC, Table 307.1(1), and 2010 SFFC Section 2703.1.1 and Table 2703.1.1(1)
   ___ Yes
   ___ No

45. Tank is located in an exhausted enclosure (affects exempt amounts). Reference: 2010 CBC, Table 307.1(1), and 2010 SFFC Section 2703.1.1 and Table 2703.1.1(1)
   ___ Yes
   ___ No

46. Room where tank is stored is sprinklered to Extra Hazard Group II hazard classification. Reference: 2010 NFPA 13, Section 5.4.2
   ___ Yes
   ___ No

47. Tank has a nominal capacity of 480 gallons or less, building is fully sprinklered in accordance with NFPA 13, and tank is located in an exhausted enclosure. Reference: 2010 SFBC, Table 307.1(1), and 2010 SFFC Section 2703.1.1 and Table 2703.1.1(1)
   ___ Yes If yes, do not answer questions 48-53.
   ___ No

48. Tank has a nominal capacity of more than 480 gallons and is located in a room with the proper occupancy separation for H-3 occupancies (2010 SFBC, Table 508.4).
   Fire rating provided is _____________ for separation from a _____________ occupancy. Building is fully sprinklered
per NFPA 13, and tank is located in an exhausted enclosure. Interior wall and ceiling finish per 2010 SFFC, Table 803.3. Shelving, racks, and wainscoting in such rooms shall be non-combustible material compatible with the hazardous material stored. Reference: 2010 SFFC 2703.8.5.1 and 2703.9.9
___ Yes
___ No

You must also answer questions 49-53, most restrictive section applies.

49. Room where diesel tank is located is less than 1000 sq. ft. in area, not required to have an exterior wall.
   Reference: 2010 SFBC, Section 415.3, exception 2
   ___ Yes
   ___ No

50. Room where diesel tank is located is as required by Section 9.9 of the 2008 edition of NFPA 30, but not less than that required by 2010 SFBC, Table 508.4 Reference: 2008 edition of NFPA 30 Section 9.9
   ___ Yes
   ___ No

51. Room where diesel tank is located is greater than 1000 sq. ft. in area, 25% of the perimeter wall shall be an exterior wall. Two exits are required; with one door directly to the exterior, that also serves as Fire Department access. Reference: 2010 SFBC, Section 1015.1 and Table 1015.1
   ___ Yes
   ___ No

52. Fuel tank exceeds 660 gallons; the tank must be in a room by itself. Reference: 2006 Edition of NFPA 37, Section 6.3.2.2
   ___ Yes
   ___ No

53. Amount of fuel connected to any one engine exceeds 660 gallons, or the aggregate capacities of all fuel tanks in a structure exceed 1320 gallons. Provide a technical report, justifying design in regard to: recognized engineering practices, with suitable fire detection, fire suppression, and containment means, to prevent the spread of fire beyond the room of origin. Report shall be prepared without charge to the City- Approval of storage amounts in this category requires specific approval of the Fire Marshal. Reference: 2006 Edition of NFPA 37, Section 6.3.2.2 and 6.3.2.3, 2010 SFFC, 3404.2.10
   ___ Yes
   ___ No

54. Spill control / Leakage control in accordance with 2010 SFFC, Section 2704.2 is provided. Reference: 2010 SFFC, Sections 3404.2.10; and 2010 SFBC, Section 415.6.2.5
   ___ Yes
   ___ No
   Method used: ____________________________________________________________
55. Indoor secondary containment in accordance with 2010 SFFC Section 2704.2.2 is provided. Volume of largest vessel + 20 minutes sprinkler flow for room or minimum sprinkler design area, whichever is smallest. A monitoring method to detect hazardous materials in the secondary containment system is required (leak detection), and shall be equipped with a distinct visual or audible alarm to an approved area and signage per 2010 SFBC, Section 415.6.2.6. Reference: 2010 SFFC Sections 2704.2.2.1, 2704.2.2.3, 2704.2.2.4, and 2704.2.2.5; and 2010 CBC Section 415.6.2

___ Yes
___ No

Method used; Include volume of secondary containment and justification (attach calculations).

56. Fuel Tank is filled via a closed piping system with remote fill. Required for all new installations of aboveground storage tanks in buildings, unless specifically approved by the Fire Marshal. Reference: 2010 SFFC, Sections 3403.6 and 3404.2.7.5.6

___ Yes
___ No

57. Remote fill inlet is located outside of building, free from sources of ignition and a minimum of 5 ft. away from building openings or of lines of property that can be built on. Opening is provided with a tamper-proof, liquid-tight cap which is closed when not in use and is properly identified. 2010 SFFC, Sections 3404.2.7.5.2 and 3404.2.7.5.6

___ Yes
___ No

58. Remote fill inlet is provided with a permanent spill containment basin to prevent the inflow of hazardous substances into the environment. Reference: 2010 SFFC, Section 3404.2.9.7.8

59. Overfill protection is provided in accordance with the 2010 SFFC, Sections 3404.2.7.5.8, 3404.2.9.7.6, 3404.2.9.7.6.1, and 3404.2.9.7.6.1

60. All tank openings are in accordance with 2010 SFBC, Section 415.6.2.10; 2010 CFC, Section 3403.6.7; and 2008 Edition of NFPA 30, Section 24.14

___ Yes
___ No

61. Metallic fill pipes are designed to minimize the generation of static electricity by terminating the pipe within 6 inches of the bottom of the tank, and will be installed to avoid excessive vibration. 2010 SFFC, Section 3404.2.7.5.5

___ Yes
___ No

62. Piping systems are supported and protected against physical damage and excessive stresses in accordance with MSS SP-69, Pipe Hangers & Supports–Selection and Application. Flexible connectors are provided to protect the piping system against damage caused by settlement, vibration, expansion, contraction, or corrosion. Reference:
2006 Edition of NFPA 37, Section 6.8.2
___ Yes
___ No
Flexible connector details and specifications are included with this submittal. Make and model number:

____________________________________________________________________________________

63. Fuel piping supports are protected against exposure to fire by:
   ___ Draining liquid away from piping system at a minimum slope of not less than 1 percent.
   ___ Providing protection with a fire-resistive rating of not less than 2 hours, or
   ___ Other approved methods. Please specify:

____________________________________________________________________________________

Reference: 2008 Edition of NFPA 30, Section 27.6.2; 2006 Edition of NFPA 37, 6.8; and 2010 SFFC, Sections 3403.6.2 and 3403.6.8

64. All equipment, tanks, piping, pumps, etc. listed for their respective application and complete equipment list with
    submittal data submitted with the building permit plans.
   ___ Yes
   ___ No

65. Tank is provided with vents for normal venting in accordance with 2010 SFFC Section 3404.2.7.3 (If tank is
double
    walled, interstitial space shall be vented also).
   ___ Yes
   ___ No

66. Size of tank normal vent piping is __________, determined by (circle one) 2008 Edition of NFPA 30 Section 21.4.3
    API Standard 2000. Size of emergency vent piping is ____________, determined by the 2008 Edition of NFPA
    30, Section 22.7. Provide manufactures UL listing for tank vent sizes. Attach all calculations to verify vent
    calculations.

67. Location of vent pipe outlet(s) for tank ________________________________________________

    Vents shall be vented not less than 12 ft. above the adjacent ground level, shall be vented upward or horizontally
    away from closely adjacent walls, so that vapors will not be trapped by eaves or other obstructions, and shall be at
    least 5 ft. from building openings or property lines of properties that can be built on. Reference: 2010 SFFC,
    Section 3404.2.7.3.3

68. Tank is provided with emergency venting in accordance with 2010 SFFC Section 3404.2.7.3 and 2008 Edition of
    NFPA 30 Section, 22.7
   ___ Yes
   ___ No

69. Room where tank is located is ventilated in accordance with 2010 SFFC, Sections 2704.3 and 2704.3.1
70. Tank supports and connections are designed to resist damage as a result of seismic activity. Reference: 2010 SFFC, Sections 2703.2.8, and 3404.2.9.3; and the 2008 Edition of NFPA 30, Section 22.5.1

___ Yes
___ No

71. Piping, valves, tanks, or fittings are subject to vehicular damage. (Guard posts or other approved means of protection shall be installed) Reference: 2010 SFFC, Sections 2703.9.3 and 3404.2.9.7.5

___ Yes
___ No

72. Fuel supply system is provided with adequate alarms, float-controlled valves, or mechanical or remote-reading-level gauges or protected sight glass gauges to aid personnel in properly operating the fuel system. Reference: 2006 Edition of NFPA 37, Section 6.5.2 (Note: all openings are restricted to the top of the tank).

___ Yes
___ No

73. All piping is double-walled, meets the requirements of 2010 SFFC Section 2703.2.2, 2704.2.2.5, 3403.6 and 3404.2.8.11 and is provided with a leak-detection system. Provide leak detection alarm per 2010 SFBC Section 415.6.2, 414.7 and 2010 SFFC Section 2704.2.2.5, with supervision as required by 2010 SFBC Section 414.7.3, transmitting a trouble signal to a central station. The leak detection shall also provide Emergency Alarm per 2010 SFBC Section 414.7.1 and 2010 SFFC Section 2704.9.

74. Stationary-powered fuel pumps supplying fuel tanks have stop controls sensitive to a tank’s high liquid level. Reference: 2006 Edition of NFPA 37, Section 6.5.3

___ Yes
___ No

75. Fuel tanks supplied by pumps are provided with an overflow line, a high-level alarm, and a high-level automatic shut-off. Overflow piping complies with section. Reference: 2006 Edition of NFPA 37, Section 6.5.4

___ Yes
___ No
___ n/a

76. Clearance provided around tank is a minimum of 15 inches. Reference 2006 Edition of NFPA 37, Section 6.3.5.1.2

___ Yes
___ No

77. Pressure relief valves and relief piping are provided where the potential exists for over-pressurizing fuel system piping, and is routed without valves or traps to the source tank or collection system. Reference: 2006 Edition of NFPA 37, Section 6.5

___ Yes
78. Hydrostatic test will be performed in the presence of the Fire Inspector for all piping and underground tanks.
   Reference: 2010 SFFC, Sections 3403.6.3 and 3404.2.12
   ___ Yes
   ___ No

ADDITIONAL REQUIREMENTS FOR INSTALLATIONS SERVING REQUIRED EMERGENCY POWER SUPPLY
SYSTEMS (EPSS) (THIS CATEGORY INCLUDES AEMERGENCY SYSTEMS@ AND ALEGALLY REQUIRED
STANDBY@ AS DEFINED BY THE NEC. SEE DEFINITIONS SECTION. (COMPLETE QUESTIONS 79-92
WHEN INSTALLATION SERVES THIS TYPE OF EQUIPMENT).

79. Locations housing required EPSS and Standby equipment will be provided with battery-powered emergency
   lighting. The charging system and the normal service room lighting shall be supplied from the load side of the
   ___ Yes
   ___ No

80. Generators serving EPSS systems will have a remote panel, powered by the storage battery that complies with
   the 2005 Edition of NFPA 110, Section 5.6.5.2. Such panel will be located immediately outside of the EPSS
   service room and will include all status indicators as required by 2005 NFPA 110 Table 5.6.5.2
   ___ Yes
   ___ No

81. EPS equipment is provided with a minimum of 36 inches clearance on all sides. Required when generator is used
   for required emergency loads. Reference: 2005 Edition of NFPA 110, Section 7.2.5
   ___ Yes
   ___ No

82. Installation is serving high-rise building emergency power systems.
   ___ Yes
   ___ No

   Emergency and standby power status indicators are required in the fire control room per 2010 SFBC, Section 911.
   Status indicators shall include but not be limited to: running, failure to start, controller off automatic, trouble
   (e.g., low oil, high temperature, overspeed), fuel leak detection alarms (piping, tank, room), low fuel level alarms.
   Generator supervision devices, manual start and transfer features.

83. Power Distribution/Riser Diagram has been reviewed and approved by the Electrical Inspection Division.
   Name of approving inspector: ________________________________

84. For generators serving EPSS, prime movers are provided with instruments and accessories as required by 2005
   Edition of NFPA 110, Section 5.6.3
   ___ Yes
   ___ No
   ___ Yes
   ___ No

86. Electrical rooms for normal building power will be free of EPSS equipment.
   Reference: 2005 Edition of NFPA 110, Section 7.2.2
   ___ Yes
   ___ No

87. Engines serving EPSS are provided with a remote manual stop station of a type to prevent inadvertent or unintentional operation station located immediately outside the generator room. Reference: 2005 Edition of NFPA 110, Section 5.6.5.6
   ___ Yes
   ___ No

88. At least two sets of instruction manuals in accordance with Section 8.2.1 of the 2005 Edition of NFPA 110 will be provided to the building. One set will be located in a secure, convenient location near the equipment. The other set will be kept in a different secure location. Reference: 2005 Edition of NFPA 110, Sections 8.2.1 and 8.2.2
   ___ Yes
   ___ No

89. For EPSS systems, a routine and operational testing program has been designed and a written record in accordance with 2005 Edition of NFPA 110, Section 8.3.4 and 8.3.4.1 is in place to begin immediately after acceptance, including transfer switch and battery requirements. Reference: 2005 Edition of NFPA 110, Sections 8.3.5 and 8.3.7.
   ___ Yes
   ___ No

90. Generators serving EPSS shall employ a program-timing device to exercise the EPSS as described in Chapter 8 of the 2005 Edition of NFPA 110. The transfer switches for Level 1 and Level 2 EPSS shall transfer the connected load to the EPS per the 2005 Edition of NFPA 110, Sections 6.2.11 and 6.2.11.1
   ___ Yes
   ___ No

91. All elements of the fuel delivery systems serving emergency generators and fire pumps for required emergency power are provided with a means of secondary power. Reference: 2005 Edition of NFPA 110, Section 7.9.9 and SFFD Interpretation
   ___ Yes
   ___ No

92. Fuel Tank is sized so that fuel is consumed within storage life (1-1/2 years), or provisions will be made to replace
stale fuel with fresh fuel. Reference: 2005 Edition of NFPA 110, Section 7.9.1, 7.9.1.3

___ Yes
___ No

93. Fuel tanks for EPSS are placed as close as practicable to the prime mover. Reference: 2005 Edition of NFPA 110, Section 7.9.2

___ Yes
___ No

Final approval of fire pumps requires completion of a field acceptance test conducted in accordance with 2007 Edition of NFPA 20, Section 14.2.1. Pump test shall be attended by pump manufacturer, engine manufacturer, transfer switch manufacturer (when supplied), installing contractor, and should be attended by the owner. The SFFD District Fire Inspector shall be notified in advance of the time and place of the test, and shall be provided with the pump acceptance test data.

Final approval of required emergency generators requires completion of Installation Acceptance Testing in accordance with the 2005 Edition of NFPA 110, Section 7.13. Person(s) responsible for testing generator shall exhibit competence, or may be rejected at the time of the test. The SFFD District Fire Inspector and the DBI Electrical Inspector shall be notified in advance of the time and place of acceptance testing, and shall be provided with written testing data.

Prepared by: ________________________________
(Please include professional title and stamp)
Firm Name
Address
Phone Number
Fax Number