CITY OF OAKLAND
OAKLAND FIRE DEPARTMENT
FIRE PREVENTION BUREAU
250 FRANK H. OGAWA PLAZA•SUITE 3341•OAKLAND, CALIFORNIA 94612-2033
Reviewed by: Ly Ly Lam, E.I.T
Fire Plan Examiner
Phone (510) 238-6675
Email: LLam@oaklandca.gov

(510) 238-3851
FAX (510) 238-6739
TDD (510) 238-3254

Comments: Rev. 0
Bldg. Permit:

661 Washington Street
U utility / Miscellaneous Structure

FDPR24_01476
Date: 02.25.25

Description of Work: Removal of two (2) underground diesel storage tanks and installation of one (1) above ground diesels storage tank within a new hire rated enclosure.

APPROVED WITH COMMENTS AND CONDITIONS, SUBJECT TO FIELD INSPECTION

Item No., Sheet No., Review Comment, Explanation
Italicized words and phrases are quoted provisions of the code.

2022 CBC
2022 CFC

1. Provide full size set of stamped and signed plans, printed in color at time of inspection with this comment/condition sheet attached.

2. Obtain the necessary electrical and building permits for the enclosure housing the diesel tank. In Oakland, separate permits are necessary for mechanical, electrical, and plumbing work. Most of these permits do not require plan submissions; however, you may request a plan review for an additional fee. It's important to note that these permits are distinct from building permits and must be obtained before commencing any related work.

3. Obtain separate fire department permits required for:
    1. Installation of automatic extinguishing system required for H occupancy fire sprinkler systems per CFC 903.2.5 and Table 903.2.5.2. CFC 102.10 addresses the most restrictive code provision to apply.
        - ✓ 102.10 Conflicting provisions. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in a specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.
        - ✓ AFFF foam fire protection is no longer allowed as of January this year. SFFF is the acceptable alternative to address environmental concerns.
        - ✓ CBC requires the minimum separation distance of the existing high-rise I-2.1 to have at least 20 feet separation from an adjacent building or property line.
        - ✓ Automatic fire suppression installation in the enclosed tank space is a deferred submittal by the installing C16 contractor. It is advisable that a registered consultant from your office prepare the necessary evaluation for the protection of the enclosed fuel storage facility either mist or SFFF automatic fire protection or suitable alternative.
    2. Fire safety, evacuation and lockdown plan per CFC 2022 404
    3. Installation of emergency responder radio coverage system (ERRCS) per CFC 510
    4. Tank removal permit and tank installation permit to HAZMAT unit Javan Smith. Tank removal permit may be issued to avoid state penalties for UG single-walled tanks to beat the deadline set by the State.

4. Provide FDC at street frontage of fire apparatus access and hose outlet connection.

5. Provide an approved key box at all exterior entrances to the building, fuel tank and generator All

CFC 506

Retain this FPB review document with approved plans at the site for Fire Inspector's reference to proceed with inspection

keys shall in place with appropriate labeled keys.

CFC 5703.5
CFC 5703.5.1
CFC 5703.5.2
CFC 5704.2.3

6. Provide labeling for Diesel, no smoking, flammable liquid and NFPA 704 diamond noted as well as signage. Labeling and signs for storage tanks and storage tank areas shall be comply with section 5704.2.3.1 and 5704.2.3.2

CFC 5004.2.1
CFC 5004.2.2

7. Verify / obtain spill control and secondary containment or double wall due to exceed the amount limit for liquids 55 gallons. UL 142 is a standard for steel aboveground tanks. Provide a UL 142-compliant double-wall tank and ensure the generator complies with UL 2200, as required by Section 1203.1.1

CFC 5704.2.7.3

8. Tank venting shall comply with 2022CFC 5704.2.7.3

   Vent pipe outlets for tanks storing Class I, II or IIIA liquids shall be located such that the vapors are released at a safe point outside of buildings and not less than 12 feet (3658 mm) above the finished ground level. Vapors shall be discharged upward or horizontally away from adjacent walls to assist in vapor dispersion. Vent outlets shall be located such that flammable vapors will not be trapped by eaves or other obstructions and shall be not less than 5 feet (1524 mm) from building openings or lot lines of properties that can be built upon. Vent outlets on atmospheric tanks storing Class IIIB liquids are allowed to discharge inside a building where the vent is a normally closed vent.

9. Field verification of storage tanks in refineries, bulk plants or terminals regulated by section 5706.4 or 5706.7 shall have overfill protection in accordance with API 2350 per California Fire Code (CFC) Section 5704.2.7.5.8. However, an exception applies to outdoor aboveground tanks with a capacity of 1,320 gallons or less. Since the proposed diesel tank has a capacity of 1,200 gallons, it falls within the exception threshold and is not subject to the overfill prevention mandate.

10. Field verification of protected above-ground tanks shall not be filled in excess of 95 percent of their capacity on each tank. During tank-filling operations the system shall comply with one of the following per 5704.2.9.7.5.
    1. The overfill prevention system shall include the following:
       1.1. An independent means of notifying the person filling the tank that the fluid level has reached 90 percent of tank capacity by providing an audible or visual alarm signal, providing a tank level gauge marked at 90 percent of tank capacity, or other approved means.
       1.2. Automatic shut off of the flow of fuel to the tank when the quantity of liquid in the tank reaches 95 percent of tank capacity. For rigid hose fuel-delivery systems, an approved means shall be provided to empty the fill hose into the tank after the automatic shutoff device is activated.
    2. The system shall reduce the flow rate to not more than 15 gallons per minute (0.95 L/s) so that at the reduced flow rate, the tank will not overfill for 30 minutes, and automatically shut off flow into the tank so that none of the fittings on the top of the tank are exposed to product because of overfilling.

11. Integrity test of tank needs to be completed in presence of OFD inspector prior to introducing fuel.

12. Ref. 5704.2.7.5 Tank openings other than vents. Tank openings for other than vents shall comply with Sections 5704.2.7.5.1 through 5704.2.7.5.8.

    5704.2.7.5.1Connections below liquid level. Connections for tank openings below the liquid level shall be liquid tight.

    5704.2.7.5.2 Filling, emptying and vapor recovery connections. Filling, emptying and vapor recovery connections to tanks containing Class I, II or IIIA liquids shall be located outside of buildings in accordance with Section 5704.2.7.5.6 at a location free from sources of ignition and not less than 5 feet (1524 mm) away from building openings or lot lines of property that can be built upon. Such openings shall be properly identified and provided with a liquid-tight cap that

shall be closed when not in use.

13. Ref. 5704.2.7.5.5 Fill pipes and discharge lines. For top-loaded tanks, a metallic fill pipe shall be designed and installed to minimize the generation of static electricity by terminating the pipe within 6 inches (152 mm) of the bottom of the tank, and it shall be installed in a manner that avoids excessive vibration.

CFC 5704.3.7.5.2
CFC2305.5

14. Provide manual fire extinguish system having a rating of not less than 20-B and shall be located not less than 10 feet or more than 50 feet from any Class I or II.

CFC Chapter 33

15. Observe fire safety during demolition and construction work. Call Oakland Fire Department Dispatch Center at (510) 444-3322 and the Fire Alarm service provider during temporary shutdowns and service resumption of sprinkler and fire alarm systems. Provide 2A10BC fire extinguishers within 75 feet or one fire extinguisher every 1500 square feet, whichever is more during demolition and construction work. Ref.: CCR Title 19, Ch. 3, 2016 CFC Section 906. Comply with 2016 CFC Section 605 to observe electrical safety.

16. Contractor(s) shall leave a copy of the Building Permit job card of the City's Inspectors to verify the building permit, and for the Fire Inspector to provide comments and observations on the progress of completion of the fire sprinkler system. A separate OFD Form supplements the Building Permit job card.

17. The issuance of a permit does not allow violation of any applicable codes. Compliance is the ultimate responsibility of the permit applicant, the designer, and the owner. Ref.: 2019 CFC Section 105.4.4. Installation subject to 2018 NFPA 30, subject to field inspection.

18. As required by Section 105.3.7 of Chapter 15.12 of the Oakland Municipal Code: "I hereby agree to save, defend, indemnify and keep harmless the City of Oakland and its officials, officers, employees, representatives, agents and volunteers from all actions, claims, demands, litigation, or proceedings, including those for attorneys' fees, against the City in consequence of the granting of this permit or from the use or occupancy of the public right-of-way, public easement, or any sidewalk, street or sub- sidewalk or otherwise by virtue thereof, and will in all things strictly comply with the conditions under which this permit is granted. I further certify that I am the owner of the property involved in this permit or that I am fully authorized by the owner to access the property and perform the work authorized by this permit."

19. Maintain one stamped copy of approved plans on job site. Email fpbreceptionist@oaklandca.gov to schedule inspections, at least 72 hours prior, to arrange witness of acceptance and functional tests.

20. This construction permit will expire after 180 days from the approval date or the latest inspection date, whichever is latest. Submit approved set of plans to fpbreceptionist@oaklandca.gov to request for permit extension. Ref: CFC 105.3.1.