Fire Permit Submittal Checklist

Emergency Backup Generator

Planning & Community Development 17500 Midvale Ave N Shoreline, WA 98133 206-801-2500 pcd@shorelinewa.gov



This checklist covers all the requirements for all new emergency back-up generator system installations or modifications to existing emergency back-up generator systems as regulated by current International Fire Code/Building Code, NFPA 110, NFPA 70 (NEC), NFPA 30, NFPA 37, NFPA 54, NFPA 58, NFPA 72 and Shoreline Fire Municipal Code. One Fire permit is required for each separate installation.

Name	City Staff	
Date	Zone District	
Address(es) or Tax Parcel ID(s)		
Project Description		
-		

The following information is needed to submit an application for review. Read each item carefully and provide all applicable information. Submittal items may vary based on your scope of work and property characteristics.

To access this checklist online visit shorelinewa .gov/checklists



Please review Shoreline Municipal Code (SMC) <u>15.05.050</u> to learn more about the City's amendments to the International Fire Code (IFC). If you have questions about the City's fire code or submittal requirements, please email the **Fire Marshal's Office** at <u>fmo@shorelinefire.com</u>; their staff can walk you through the requirements.

Incomplete submittals and documents not meeting the standards listed below will not be accepted for review.

Submittal Standards

Applications for this type of permit must be submitted electronically. Please review the City's <u>Electronic</u> <u>Permitting handout</u> to find out how to set up an account, submit applications, submit revisions, check on your permit status and more.

All forms and plans must be in Portable Document Format (PDF). PDFs shall be printed or plotted to PDF, not scans of an image. All PDF plans shall be plotted to scale and include a graphic scale bar. PDFs shall be flattened and unlocked to allow for document mark-up. A 2-inch tall by 3-inch-wide space must be left blank on the cover sheet of all plans to allow for City stamps.

Drawings must be clear, and information must be legible. Documents must be named in accordance with the <u>City's naming conventions</u>. Each document listed below must be uploaded as its own PDF file and may not be combined with other documents.

NOTE: Sprinkler system plans, calculations, and contractors' materials and test certificates submitted to the City shall be stamped pursuant to WAC 212-80-083 including stamps for NFPA 13D, 13R, and 13.

Required Documents

- ☑ Permit Application and Critical Area Worksheet
 - Completing any work related to this permit application without approval from the Shoreline Fire Marshal's Office may result in fines.

☑ Submittal Fee

o Please reference the City's fee schedule for current application fees.

☑ Construction Documents

 Please review the City's <u>Construction Documents Handout</u>, though some requirements may not apply.

☑ Site Plan

 A scaled site plan showing the location of all buildings on the site and the generator location (interior or exterior with setback to property lines clearly shown. Streets, alleys, easements, fences, gates and a north arrow must be shown.

☑ Plans

- A scaled detailed plan showing the location of the generator room, room size, fuel source, tank size and location, fuel piping routes (with minimum required slope noted), generator refueling station location, and pipe size and materials. Fuel oil piping to generator must comply with IMC Chapter 13 and have <u>double containment</u>.
- o If generator is located inside a building, specify which level of the building the generator and fuel tank are located, provide calculations showing compliance with manufacturer's installation requirements for ventilation supply and exhaust, engine cooling and combustion-air openings. Provide scaled interior and exterior elevations views showing the location of the generator, ventilation openings, (both supply and exhaust), fuel tank vent(s) and the ending exhaust pipe terminal.
- Physical protection of equipment must be detailed on the plan if the generator and fuel tank is located outside. (IMC Section 1305.2)
- o Information on spill control, secondary containment and drainage must be provided.

☑ Cut Sheets

 Must provide cut sheets for all materials proposed including Manufactures data sheets on the generator, fuel tank, fuel piping and double containment protection, refueling station and other equipment required for installation as per referenced codes.

Additional Requirements associated with Electrical, Building and Land Use submittals

☑ Electrical Permit Submittal Requirements

- Load summary, including each step of load (what loads are transferred to the generator at any one time) in starting and running (separate columns totaled to verify capacity).
- Location of transfer switches for the emergency and legally required systems.
- What equipment is on which transfer switch and how long of a delay is allowed for each piece of equipment to come on after the normal power is off.
- Physical protection of the circuit wiring for pressurization fans and fire pumps from the generator to the fan(s) and pump.
- Sizing of the generator conductors between the generator and first over-current device.
- One line or riser diagram showing characteristics and generator sizing.

☑ Building Permit Submittal Requirements

- Seismic/gravity anchoring and support per ASCE 7-05 Section 13.3 Refer to seismic bracing matrix documents for more information.
- Emergency power system and transfer switch (ATS) if set inside the building, must be located in a separate room enclosed with 2-hour fire barriers. IBC Section 403.4.8.1.
- Control and power wiring serving shaft pressurization fans must be provided with 2-hour fire rated protection. Illustrate this on the building plans. See IBC Section 909.20.7.1.
- Where an on-site, stand-alone fuel storage tank is provided, the size, type and location must be identified. The applicant must specify occupancy classification for on-site fuel storage.

- For legally required generators: Combustion, cooling and ventilation equipment air needs to be from an exterior wall opening without self-closing dampers, shutters or other devices.
 NFPA 110 section 7.7-7.7.7.
- o Equipment screen and platform design details, if applicable, must be provided for review.
- Shaft used to provide exhaust, combustion air and/or make-up air must comply with IBC Section 707. A complete shaft assembly of listing numbers and associated details must be provided.
- ☑ Land Use Submittals Requirements
 - The ventilation openings and engine exhaust pipes, when visible from the street, need to be designed in a manner that will not detract from the building design.
 - All residential/commercial mechanical equipment installed must conform to the City of Shoreline Noise Code Standards.

	Noise Code Standards.
□ Other	Documents as Required
0	
0	

Additional Permits

These are additional Permits that may be required to accompany your Binding Site Plan project application depending on your scope of work.

Installation of related mechanical equipment required to meet standards set forth by NFPA 110,
 International Fire Code and the Shoreline Fire Municipal Code.

□ Electrical Permit

- Installation of electrical circuits and fixtures
- o Permits through Washington State Labor & Industries (L&I) not through the City of Shoreline.

Inspections

Inspections are scheduled through the Shoreline Fire Department Fire Marshal's Office at inspections@shorelinefire.com. For additional details and inspection requirements, please refer to the conditions attached to the approved permit.

- ☑ Required inspections for Emergency Back-up Generators:
 - On-site acceptance test shall be performed after the installation with all EPSS accessory and support equipment in place and operating.
 - o Test shall be performed as required by NFPA 110 7.13.1-7.13.4.6.
 - o Test shall be witnessed by authority having jurisdiction.
 - o All final testing details and reports shall be made available to the authority having jurisdiction.
- At the completion of acceptance testing the final report shall be sent to the Shoreline Fire Marshal's Office and be uploaded by the testing contractor into The Compliance Engine at: www.thecomplianceengine.com within 24hours.