

# Check for Fuel

## Diesel

Diesel fuel is by far the best choice for standby generator fuel. It is readily available even in bad weather. It has the highest heat value. It starts really well, among other virtues, **But** there are some things you need to watch out for.

- Contamination
  - Water is the most common problem
    - Check using water finding paste. Available on the internet.
  - Microbes can also cause you troubleSee my video on [Fuel Analysis](#)
- Your fuel level gauge may be crap
  - Factory supplied fuel gages can be notoriously unreliable and just plain defective. Get a wooden yard stick from a hardware store.
  - Calculate your runtime. See Resources-Download-[Fuel Consumption Chart](#)

## LPG

Propane (LPG) is my second choice. It's hard to contaminate and has reasonably high heat value. LPG also starts well. But, it may be hard to get a delivery in bad weather so keep your tank full.

- LPG can either be vapor withdrawal or liquid withdrawal. Smaller systems, below 50kW are generally vapor withdrawal just like a furnace; but when systems are larger they use liquid withdrawal and vaporize the fuel on the engine.



Vaporizer/regulator

The issue we have found with these is that while the fuel vaporizes, the lubricating oil that the refinery puts in the fuel tends to condense out and foul the vaporizer and fuel lines.

## Natural Gas

Natural gas is convent, but it is a poor standby generator fuel.

- It has a low heat value, 910 btu/cu ft. This is just barely powerful enough to run an engine. Any dilution, drop in pressure, or contamination can shut you down.
  - We have found water vapor contamination. I have one location where there is so much water vapor in the fuel supply that we have to keep a heat tape wrapped around the valves and regulators to keep them from freezing on the inside.
  - Gas pressure must be maintained at 4 oz. In the winter it is common for pressure to drop causing the engine to starve for fuel

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