

Gas Regulators

- Council Presentation
- April 2026





Purpose of Natural Gas Regulator



Reduce and control gas flow through pipelines



Maintain safe and consistent pressure



Ensure proper operation of appliances

Stoves
Hot water heaters
Furnaces

The Role of Pressure Regulators in Gas Systems

- Reduce high-pressure gas to a safe, usable level

- Automatically maintain consistent outlet pressure

- Installed at every residential meter location

- Protect household appliances from excess pressure

- Required for all new and existing gas service installations

- Ensure stable pressure for appliance performance

- Prevent damaging pressure spikes

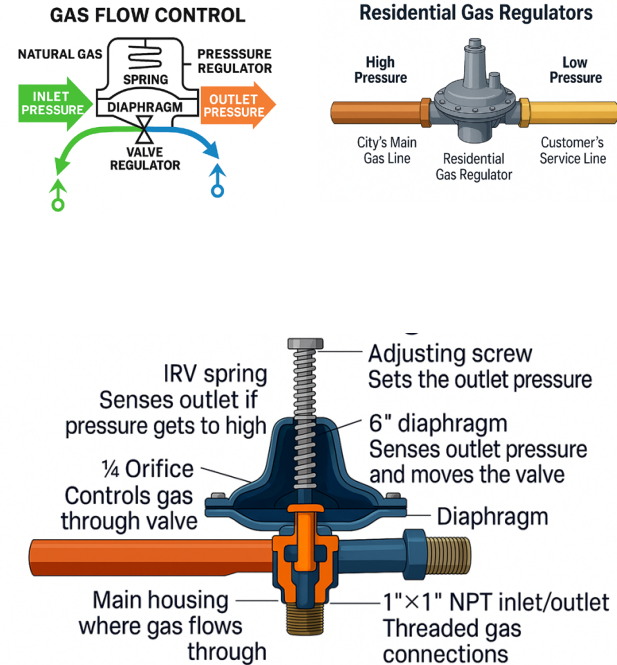
- Increase system reliability and overall safety

- Maintain steady gas flow during peak demand

- Support compliance with industry and regulatory standards

How Pressure Regulation Works

- High-pressure gas enters the regulator and passes through a small orifice—only one quarter of an inch wide. A diaphragm inside the device continuously senses the outlet pressure. As that pressure fluctuates, the diaphragm automatically adjusts the internal valve position. This mechanism ensures that just the right amount of gas flows through to keep the outlet pressure steady and safe for customer use.





CCGAS utilizes gas regulators to safely and accurately reduce gas pressure from the City's high-pressure main into the customer's lower-pressure service line. This function ensures that residential gas appliances operate within performance parameters established by equipment manufacturers and required under 49 CFR Part 192, Subpart H standards. Gas regulators also provide critical over-pressurization protection, reducing the risk of appliance damage, gas leaks, or system instability.

As the City's natural gas infrastructure continues to expand, CCGAS has broadened its operational footprint through the acquisition of the City of Rockport's gas utility system. This expansion requires additional upgrades and system enhancements to integrate assets, support increased service demand, and maintain consistent safety and reliability across the enlarged service area.

The replacement of aging regulator models supports ongoing system growth, including new construction, while also improving system safety and regulatory compliance at existing meter locations. These modernization efforts reduce service interruptions, improve pressure stability during high-demand periods, and enhance public safety by lowering the risk of pressure-related incidents. Together, these improvements strengthen the reliability and resiliency of the City's gas distribution network.



Questions

