**How a DIY Gas Guard Spray-Type Aerator:** Itis a chemical-free way to remove volatile gases. It works by spraying untreated water into a fine mist inside a special tank. This process lets gases escape, adds oxygen, and starts the cleanup process before the water is sent on to a filter.

**Step-by-Step Operation**

1. **Water enters the tank**: The well pump pushes untreated water into the aerator.
2. **Spraying**: Inside the tank, the water is forced through spray nozzles that break it into a fine mist. This increases the water’s contact with air.
3. **Gas release (off-gassing)**: As the water mists, problem gases like hydrogen sulfide (the “rotten egg” smell), radon, carbon dioxide, and methane are released into the air inside the tank.
4. **Oxidation**: At the same time, oxygen mixes into the water. This causes dissolved minerals—like iron and manganese—to change into solid particles (rust-colored iron or black manganese flakes).
5. **Ventilation**: A blower fan at the top of the tank vents the unwanted gases outdoors, keeping them from building up inside.
6. **Re-pressurization**: The treated water collects at the bottom of the tank. A second pump then pressurizes it and sends it into your home’s plumbing.
7. **Final filtration**: Because the aerator only changes the form of contaminants (turning dissolved minerals into solids), a separate **post-filter**—like a backwashing sediment filter—is needed downstream to remove those solid particles before the water reaches your faucets.

**Benefits & Things to Know**

* **Chemical-free treatment** – Works with plain air instead of chlorine or additives.
* **Versatile** – Effective at reducing rotten egg odor, radon, carbon dioxide, methane, and other volatile gases.
* **Requires a filter** – The aerator doesn’t remove solids by itself. A follow-up filter is needed to capture the oxidized particles.

In short, the aerator **airs out your water and jump-starts the cleanup process**, while a filter finishes the job. Together, they give you fresher, better-tasting water without using chemicals.