



# The ! Voice

FEBRUARY 2025



## Message from the President

Glenn Walker, President [walker@vsthose.com](mailto:walker@vsthose.com)

## VST Product Enhancements

In the recent past, various regulatory agencies have adopted numerous mandates that have added costs on gasoline dispensing facilities (GDF's). At VST we call many of those regulations, "grudge" purchases required to meet the various requirements. Over the years we have developed VST's dripless nozzles, Platinum hoses, GREEN MACHINE™, and P/V valves to meet the various requirements. As our development continues, our CARB certified EVR P/V valve was developed to better control the underground storage tank emissions (UST's) and more importantly our mid mount design provides unsurpassed safety during the normal testing requirements.

VST has now combined our complete product range and has recently added in our remote monitoring system. With this total approach VST has demonstrated > 98 % efficiency that incorporates forecourt and UST emission savings. Once considered a "grudge" purchase, the VST system allows station owners to increase their throughput for each individual station thereby reducing cost/gallon dispensed as well as meeting the most demanding and rigorous standards known in the US. By combining VST's integrated technologies with our extended two-year warranty on hanging hardware, once a grudge purchase now has become a cost reduction. Fewer expensive service calls due to longer service life, better control of your fuel drops, safer operating equipment with VST nozzles that fail in a safe condition and lastly the in-line EVR P/V valve virtually eliminates any potential falls that plague the necessary field testing.

Some 45 years ago there were 450,000 stations in the US with a station on every street corner. Now in 2025, there are about 149,000 stations dispensing far more fuel than in 1980. Stations are cleaner, safer, and less costly to operate \$/gallon than ever before. Now with the VST remote monitoring system coupled with our complete system, we drive the industry even further into the future. Lower costs, improved safety, and superior compliance control where VST provides real time data from which you can better manage your station as well as remain in compliance with complicated regulations. VST can help with much of the day-to-day monitoring without the headaches and reports that just drive up your costs with little if any benefit.

VST has recently published an engineering document that summarizes the actual emission reductions available by utilizing our various products. To highlight our analysis, the average cost/ton has demonstrated, with real world testing, to be in the range of \$200/ton as compared to competing technologies > \$3000-\$5000/ton. Not only are we talking about overall cost reductions and safety improvements, but the environmental savings are also raising eyebrows of many in the regulatory communities.

Sincerely,

*Glenn K. Walker*

President

### VST Mission

To design and manufacture innovative products for retail refueling systems that are specifically engineered to protect the environment and consumers with safety and reliability.

### VST Values

- R:** Respect Employees, Customers, Vendors, and Environment
- O:** Operational Excellence, Quality, Delivery, Safety & Cost
- I:** Innovative Passion, Unique, Industry Leader, and Committed to Excellence

### VST Vision

VST strives to become the most trusted company in the global gasoline dispensing industry by manufacturing environmentally sustainable products and solutions that reduce harmful vapor emissions to create a future that protects the communities in which people live and work every day.



# The ! Voice

FEBRUARY 2025



## The Company

Doug Himes, Program Director [himes@vsthose.com](mailto:himes@vsthose.com)

## Environmentally Sustainable Style Products

Ground-level ozone is a well-known greenhouse gas that is a primary component of smog. Smog has been a problem for the world's cities for decades and continues to be an area that environmental protection agencies around the world monitor closely. The United States has a network of sensors across the nation that monitor ground-level ozone, measuring on the scale of parts per billion (ppb). Currently in the United States, the limit for ground-level ozone concentration is 70 ppb (0.070 ppm). Any county or group of counties with an ozone concentration higher than this 70 ppb limit is considered a non-attainment area. The local, state, and regional environmental protection agencies of these non-attainment areas are charged with implementing strategies to combat this ground-level ozone. In urban areas, ground-level ozone is most effectively controlled by reducing the amount of volatile organic compounds (VOC) in the air. This is because VOCs are a primary component of ozone, and VOCs are relatively easy to control compared to other gases.

One of the most cost-effective ways to control VOC is through reduction in emissions from gas stations. The conventional way to talk about emissions from gas stations is to consider the "emission factor", which is the rate at which VOCs are emitted to atmosphere related to station throughput. Refer to the table of the five emission sources from gas stations, along with their uncontrolled emission factors.

Source	Uncontrolled Emission Factor (lb/1000 gal)	Controlled Emission Factor (lb/1000 gal)	Solution
Phase 1 Bulk Transfer Filling	7.7	0.15	Industry
Refueling	8.4	0.42	Industry
Pressure Driven Breathing	0.76	0.024	VST
Hose Permeation	0.062	0.009	VST
Nozzle Liquid Spillage	0.7	0.003	VST

The first two items in the above table have been addressed by the industry at large in the US for decades now, with Stage 1 vapor hoses on fuel deliveries and ORVR systems in cars, respectively. The final three items in the table had been left largely unaddressed, in part because of the magnitude of the impact made. However, VST has developed solutions that reduce the emissions from these sources by 98%.

- Pressure Driven Breathing – GREEN MACHINE™ vapor processor
- Hose Permeation – Low Permeation hoses
- Nozzle Liquid Spillage – ENVIRO-LOC™ ECO style nozzles

This level of emission reduction has a potential impact on the order of 3,500 tons per year in our home state of Ohio. Applied on a national scale, this would mean nearly 90,000 tons per year of VOC emission reduction. VST firmly believes that this amount of emission reduction cannot and should not be ignored.

### VST Mission

To design and manufacture innovative products for retail refueling systems that are specifically engineered to protect the environment and consumers with safety and reliability.

### VST Values

- R:** Respect Employees, Customers, Vendors, and Environment
- O:** Operational Excellence, Quality, Delivery, Safety & Cost
- I:** Innovative Passion, Unique, Industry Leader, and Committed to Excellence

### VST Vision

VST strives to become the most trusted company in the global gasoline dispensing industry by manufacturing environmentally sustainable products and solutions that reduce harmful vapor emissions to create a future that protects the communities in which people live and work every day.



# The ! Voice

FEBRUARY 2025



## New Products

Scott Brown, VP Sales & Marketing [brown@vsthose.com](mailto:brown@vsthose.com)

## VST-EVRPV Valves Approved on All CARB EVR UST Executive Orders

VST's latest product introduction, VST-EVRPV valves are approved on all four (4) active CARB EVR Phase I Executive Orders for Underground Storage Tanks (USTs). [Executive Orders: VR-101, VR-102, VR-104, and VR-105](#)

These patented, innovative P/V valves offer the marketplace a unique mechanical design without springs or diaphragms. A simple approach for longer life. Compatible with E0 to E85 fuel blends. There are two styles of SENTRY™ VST-EVRPV series:

**VST-EVRPV-100** is a top-mount model that can be installed near the top of the vent pipe. It can be used as a quick and easy replacement for any traditionally installed P/V valve.



**VST-EVRPV-200** is an industry innovation that can be installed and tested at an easily accessible mid-mount vent pipe location. No need for a ladder or lift.



Every SENTRY™ EVRPV valve is shipped with a **VST-RC-200** specific style protective rain cap to keep out water and foreign debris.



### Test-In-Place Kit for VST-EVRPV-200

- **VST-TIP-200** kit includes:
  - Stainless steel TIP stinger
  - Testing hose
  - Bell adapter for connection to P/V test unit (P/V test unit not included)



### VST Mission

To design and manufacture innovative products for retail refueling systems that are specifically engineered to protect the environment and consumers with safety and reliability.

### VST Values

- R:** Respect Employees, Customers, Vendors, and Environment
- O:** Operational Excellence, Quality, Delivery, Safety & Cost
- I:** Innovative Passion, Unique, Industry Leader, and Committed to Excellence

### VST Vision

VST strives to become the most trusted company in the global gasoline dispensing industry by manufacturing environmentally sustainable products and solutions that reduce harmful vapor emissions to create a future that protects the communities in which people live and work every day.



# The Voice

FEBRUARY 2025



## Tech Talk

Doug Harty, Senior Applications Technician and Trainer [harty@vsthose.com](mailto:harty@vsthose.com)

## VST-EVRPV Easy Installation and Testing

VST's newest, unique product – **VST-EVRPV-200 Mid-Mount Pressure Vacuum Valve** – offers the marketplace a safe and innovative solution for the challenges typically associated with installing and testing P/V valves.

### Key Highlights for Mid Mount Style: VST-EVRPV-200

- Install and test at ground level
  - Eliminates need for ladder (OSHA #1 reported workplace injuries are due to slips and falls.)
  - Eliminates the need and expense of renting a lift.
- Annual or 3-year PV Vent compliance testing can be conducted at ground level without removing the VST-EVRPV-200 from application or working at height.
- Allows for easy vent isolation for non-volumetric Tank Testing without working at height.
- The VST-TIP-200 testing tool offers technicians the ability to conduct an “enhanced” pressure decay test at 5" or 10" WC for identifying hard to find leaks.
  - This tool can isolate the PV vent from the UST system for troubleshooting.
  - Is compatible with current P/V test stands with 2" NPT threads.
  - Can be safely conducted at ground level.



### VST Mission

To design and manufacture innovative products for retail refueling systems that are specifically engineered to protect the environment and consumers with safety and reliability.

### VST Values

- R:** Respect Employees, Customers, Vendors, and Environment
- O:** Operational Excellence, Quality, Delivery, Safety & Cost
- I:** Innovative Passion, Unique, Industry Leader, and Committed to Excellence

### VST Vision

VST strives to become the most trusted company in the global gasoline dispensing industry by manufacturing environmentally sustainable products and solutions that reduce harmful vapor emissions to create a future that protects the communities in which people live and work every day.



# The Voice

FEBRUARY 2025



## VST Training & Certifications

Doug Harty, Senior Applications Technician and Trainer [harty@vsthose.com](mailto:harty@vsthose.com)

### You can now print your certification from the VST website!

If you are a VST Authorized Service Contractor (ASC) and are listed on the VST website, you can now access your certificate directly from the website.

To do so:

1. Click this link to access the ASCs listed on the VST website: [VST ASC List on VST Website](#)
2. Find your name on the list.
3. Click "Re-send Certificate" and the system will send the certificate to the latest email address you provided us.

### VST Level A Training on Your Smartphone

Completing your Level A training for certification or re-certification has never been easier – now it can be done on your Smartphone! Click this link for a short video that walks you through the steps.

[How to Take VST Level A Training on Your Smartphone](#)

#### VST Mission

To design and manufacture innovative products for retail refueling systems that are specifically engineered to protect the environment and consumers with safety and reliability.

#### VST Values

- R:** Respect Employees, Customers, Vendors, and Environment
- O:** Operational Excellence, Quality, Delivery, Safety & Cost
- I:** Innovative Passion, Unique, Industry Leader, and Committed to Excellence

#### VST Vision

VST strives to become the most trusted company in the global gasoline dispensing industry by manufacturing environmentally sustainable products and solutions that reduce harmful vapor emissions to create a future that protects the communities in which people live and work every day.