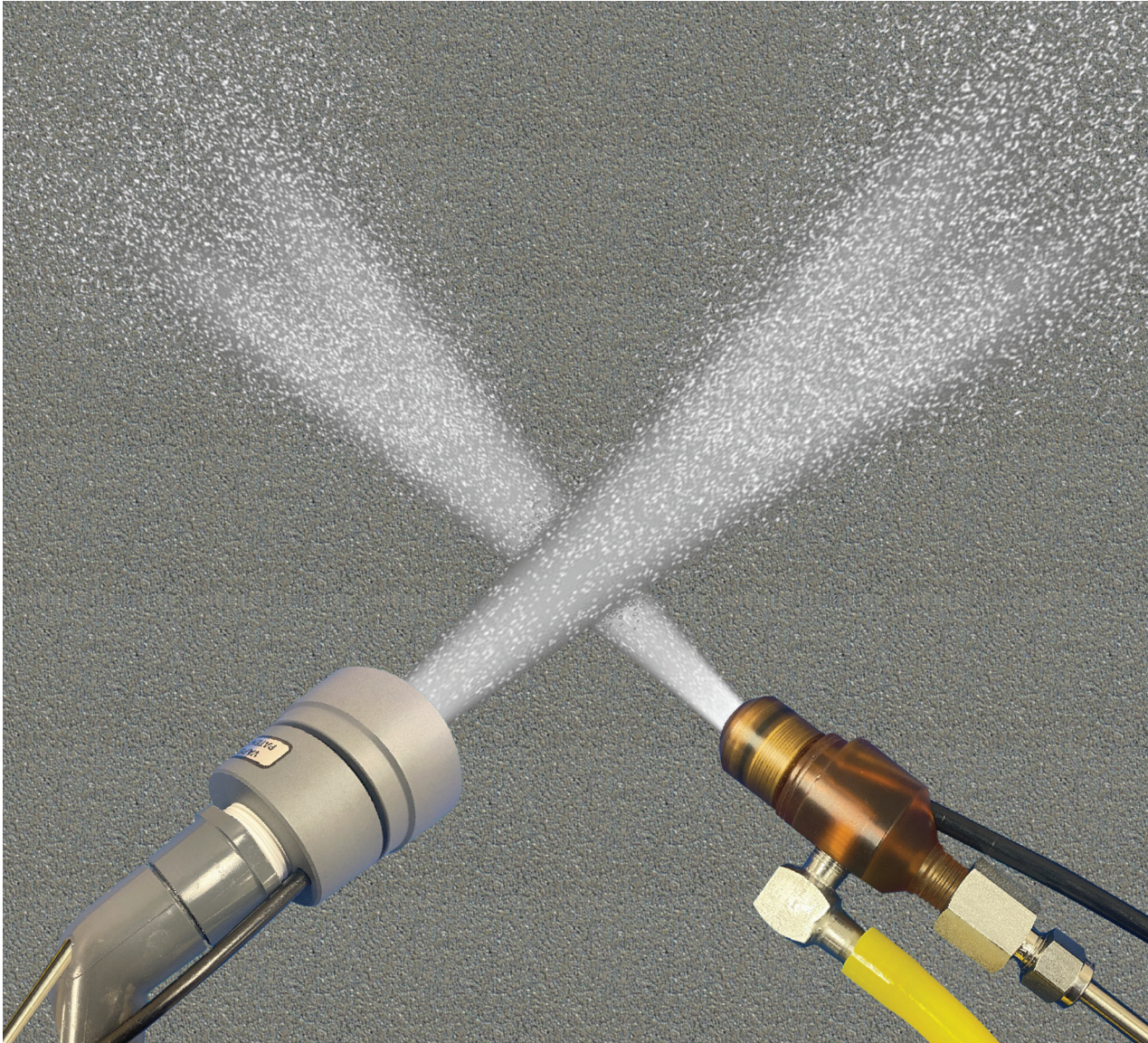


## Radical Oxidizing Technology

REMEDIATE ODOR - FOG - CORROSION



- Designed for municipal wastewater applications
- No chemicals or biosolutions required
- Minimal startup & operation costs
- Easy installation & low maintenance





# Proven Performance in Hundreds of Locations

The Vapex™ odor control system, with its patented air atomizing three-fluid nozzle, enhances the Advanced Oxidation Process by creating hydroxyl radicals ( $\cdot\text{OH}$ ); the most potent vaporized oxidant used in odor treatment.

The nozzle combines ozone, water and air to create a hydroxyl radical mist that efficiently disperses throughout enclosed spaces, such as: lift stations, wet wells, holding tanks, diversion boxes, and headworks channels.

The technology treats offensive odors in place, greatly reducing energy costs. Vapex™ units are considered a sustainable green technology, have a small footprint, require minimal water and electricity, are extremely quiet and generate no waste products.

## PROVEN

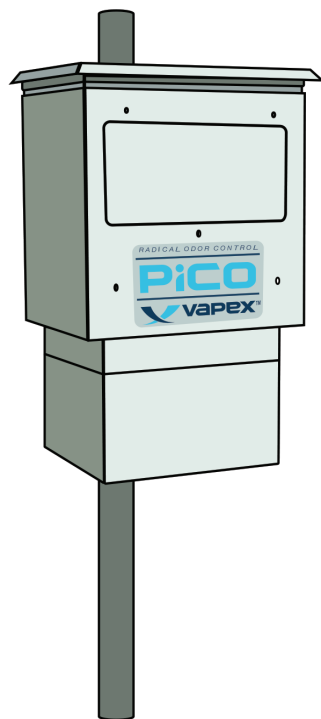
An independent study at the University of Central Florida found that hydroxyl radicals are being produced by combining micron-sized water particles and ozone using Vapex™ patented nozzle.

## ACCEPTED

Major engineering firms and a state EPA determined Vapex™ technology is effective in eliminating odors and remediating FOG.

## ESTABLISHED

Over the past 20 years, major municipalities have standardized on Vapex™ technology with over 400 installations in the US.



## ELIMINATES MICROBIAL INDUCED CORROSION

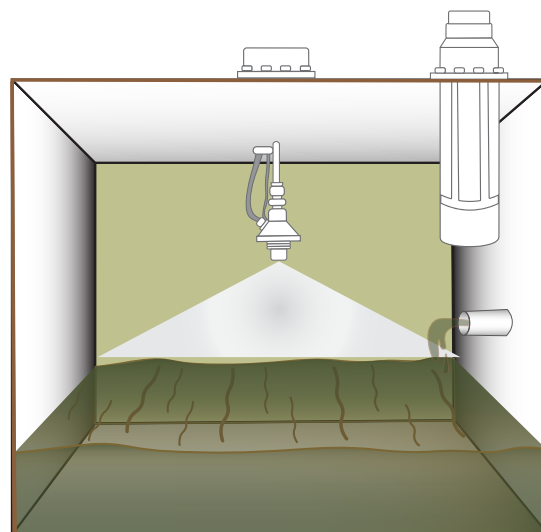
Vapex™ advanced oxidation process attacks biofilm on surfaces that lead to costly infrastructure corrosion. Surface pH in wet wells can be as low as 1; however, the powerful oxidant mist covers the entire surface eliminating the bacteria that metabolizes  $\text{H}_2\text{S}$  to sulfuric acid. This raises the pH above 6 and preserves the infrastructure.

## REMEDIATES FATS, OILS & GREASE

Vapex™ remediates FOG by breaking the double carbon bonds that form the fatty acid chain and prevents it from reforming downstream. Odors, from volatile fatty acids, are decreased significantly. Continuous treatment reduces FOG from collecting on the surface of the process water and infrastructure, reducing or eliminating the need to remove and dispose of surface FOG.

## ELIMINATES ODOR

Hydroxyl radicals efficiently oxidize reduced sulfur compounds, amines and volatile fatty acids. This technology is customizable to meet varying installation requirements and can be installed indoors or outdoors. The hydroxyl radical mist results in almost instantaneous odor reduction.

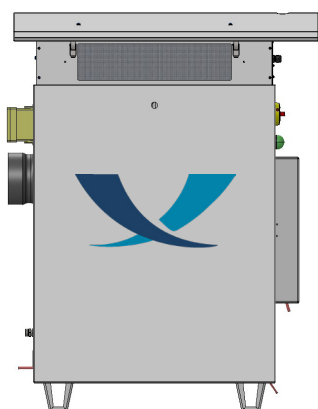




# Base Models

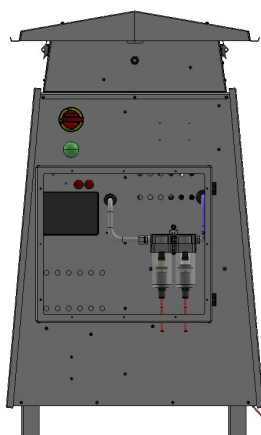
Specifications	MILLI	MICRO	NANO	PICO
Max Number of Nozzles	6	4	2	1 LV
Max Treatment Volume, ft <sup>3</sup>	42,000	26,000	10,000	750
Operating Temperature, °F	20-100	20-100	20-100	20-110
Power Supply, VAC/A/Hz, Single Phase	208-240/30/60	208-240/30/60	208-240/30/60	110-120/15A/60
Min Water Supply, gal/hr/noz	10	10	10	2
Min Water Pressure, psi	25	25	25	25
Max Water Pressure	75	75	75	75
Physical, LxWxH, inches	53 x 33 x 72	53 x 33 x 72	53 x 33 x 72	18 x 20 x 35
Weight, lbs	300 - 450	300 - 450	300 - 450	55 - 75
Max Oxidant Output, g/hr	60	50	20	10
Noise Level, dB	<75	<75	<75	<70

Treatment volume based on application location. Contact your local Vapex™ representative for more information.



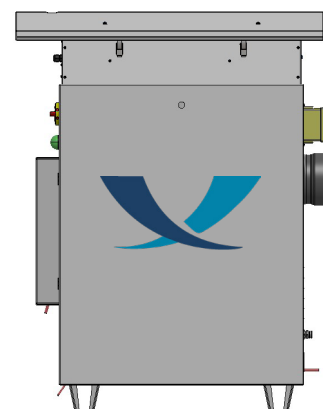
## FEATURES

- Powder coated aluminum
- Insulated cabinet
- Patented nozzles
- HMI/PLC (Excluding PICO) Red Lion
- Individual nozzle oxidant control
- Timer based oxidant control
- Auto-draining moisture removal system
- Pressure & flow based oxidant shut off
- Small footprint
- Low power usage
- Pedestal mount for added storage
- Trending critical parameters & operating conditions
- 1 Year mechanical warranty



## BENEFITS

- Treats high concentrations of:
  - Hydrogen sulfide
  - Mercaptans
  - Amines
- Eliminates odor complaints
- Reduces rate of microbial corrosion
- Remediates fats, oils & grease
- No chemicals or media required
- Quiet operation
- Easy and low cost installation
- Straightforward operation
- Environmentally friendly & sustainable
- Reaction condenses back into waste stream
- Green technology
- Low maintenance & operational costs
- Enhanced safety

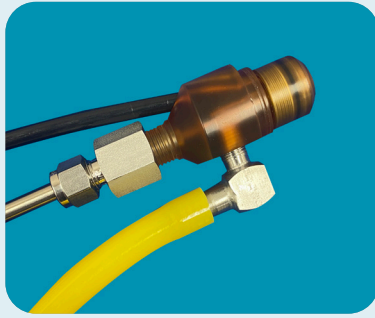


## APPLICATIONS

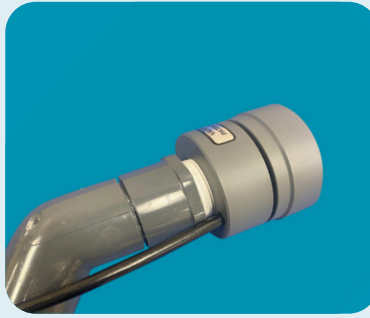
- Pump stations/ wet wells/ lift stations
- Headworks
- Gravity thickeners
- Septage receiving
- Junction boxes & siphons
- Interceptors
- Manholes
- Sludge holding tanks
- Grease & scum pits
- Grit chambers
- Covered primary clarifiers
- Holding, retention & equalization tanks
- Covered influent channels
- Rotary screens
- Covered lagoons
- Metering stations
- Diversion chambers



# Accessories



LV NOZZLE



HV NOZZLE



RXN VENT

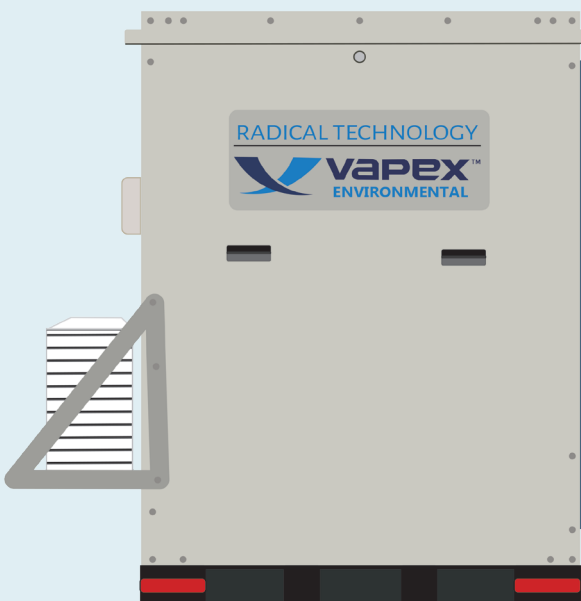
## EWAS - Extended Warranty and Service

### COMPATIBLE MATERIALS OF CONSTRUCTION

- Metals
  - Stainless Steel 316
  - Stainless Steel 304
  - Alluminum
  - Epoxy Coated Steel
- Polymers
  - HDPE
  - LDPE
  - EPDM
  - PVC/cPVC
  - FRP
  - Teflon®
- Infrastructure Material
  - Concrete
  - Polymer Concrete

### ZIPPER CABLE SHEATH

Protective sleeve for incompatible cables



### ENV ENCLOSURE

- Custom designed climate controlled enclosure
- Corrosion resistant polymer skid
- Protects unit from the elements
- TGIC Powder coated aluminum
- 12,000 BTU Mini Split
- External LOTO
- Unit shipped inside enclosure
- Unit power supply - 208-240 VAC, 30A, 60Hz, Single Phase
- A/C power supply - 208-230V, 20A, 60Hz, Single Phase
- Dimensions: 75.8" L x 44" W x 77.5" H
- Weight: 500 lbs (Average)

Contact your local Vapex™ sales representative to determine which Vapex™ unit is best suited to remediate FOG, eliminate odors and microbial induced corrosion for your application.

(888) 907 - 0004

[www.vapex.com](http://www.vapex.com)

[sales@vapex.com](mailto:sales@vapex.com)