VAPEX™
ENVIRONMENTAL TECHNOLOGIES

Radical Odor Control Technology
with Advanced Oxidation Process

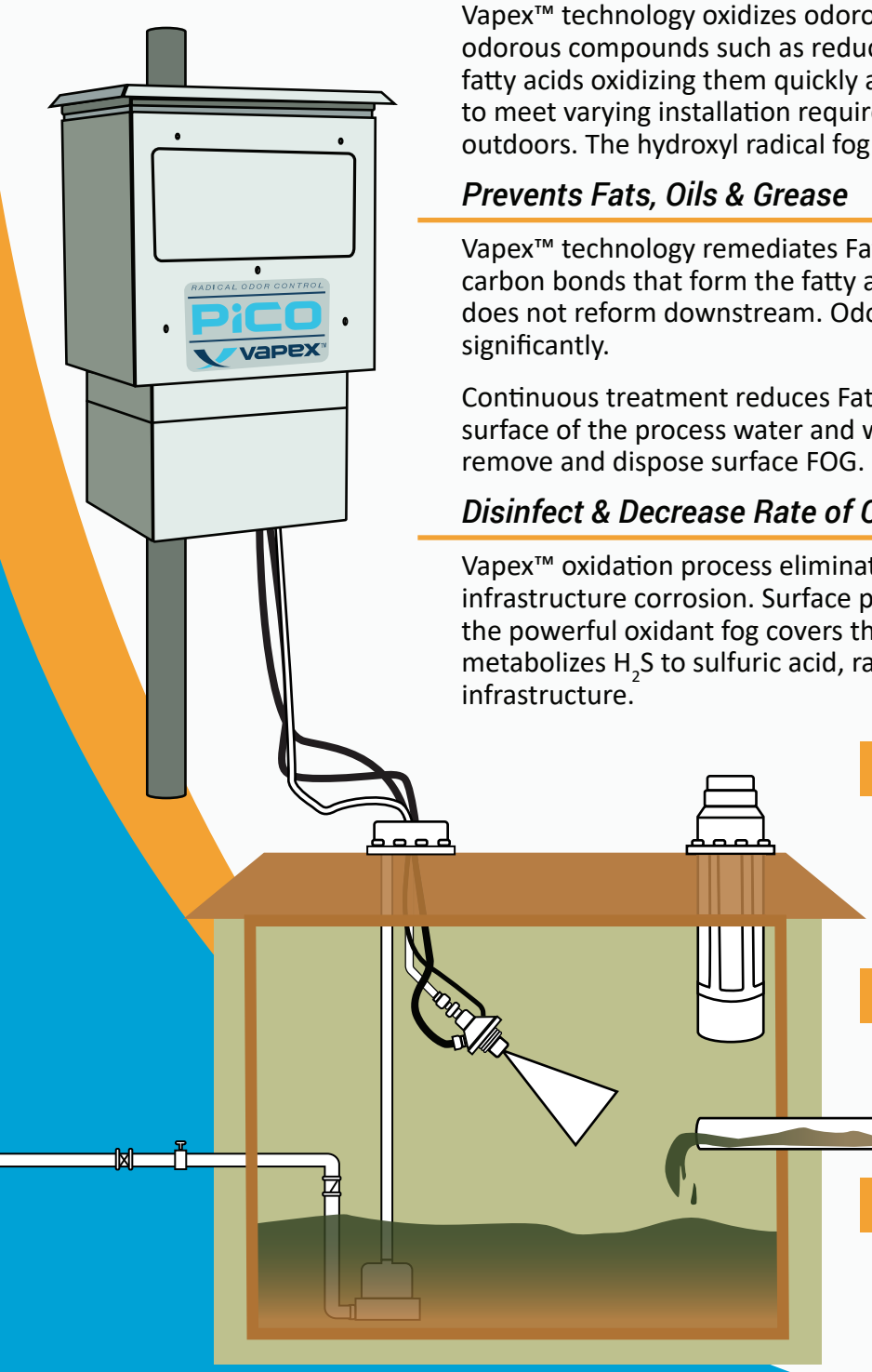
- *Treats Odors, Fats, Oils Grease & Corrosion*
- *Designed for enclosed or partially enclosed areas*
- *No chemicals or biosolutions required*
- *Minimal startup & operation costs*
- *Easy Installation & low maintenance*

Successfully Installed in Hundreds of Locations

The Vapex™ odor control system with its patented air atomizing three-fluid nozzles enhance the Advanced Oxidation Process by creating hydroxyl radicals (•OH), the most potent oxidant used in odor treatment.

Vapex™ combines ozone, water and air to create hydroxyl radical fog that is efficiently dispersed throughout enclosed or partially enclosed spaces, such as lift stations, wet wells, holding tanks, diversion boxes, and headwork channels.

Vapex™ odor control systems treat offensive odors in situ greatly reducing energy costs. Vapex™ units have a small footprint, require minimal water and electricity, and are extremely quiet.



Eliminate Odors

Vapex™ technology oxidizes odorous compounds. Hydroxyl Radicals combine with odorous compounds such as reduced sulfur compounds, amines, and volatile fatty acids oxidizing them quickly and efficiently. This technology is customizable to meet varying installation requirements and can be installed indoors or outdoors. The hydroxyl radical fog results in almost instantaneous odor reduction.

Prevents Fats, Oils & Grease

Vapex™ technology remediates Fats, Oils, & Grease (FOG) by breaking the double carbon bonds that form the fatty acid chain. By breaking the carbon bonds, FOG does not reform downstream. Odors from volatile fatty acids are decreased significantly.

Continuous treatment reduces Fats, Oils, and Grease from collecting on the surface of the process water and walls, reducing or eliminating the need to remove and dispose surface FOG.

Disinfect & Decrease Rate of Corrosion

Vapex™ oxidation process eliminates biofilm on surfaces that lead to costly infrastructure corrosion. Surface pH in wet wells can be as low as 1, however, the powerful oxidant fog covers the entire surface killing the bacteria that metabolizes H_2S to sulfuric acid, raising the pH to above 6 and preserving the infrastructure.

Proven

An independent university study found that hydroxyl radicals are being produced by combining micron-sized water particles and ozone using the patented nozzle from Vapex™.

Accepted

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

Established

Over the past 10 years, major municipalities have standardized on Vapex™ technology.

LV NOZZLE

HV NOZZLE

RXN VENT

Base Model Features

- Powder Coated Aluminum Cabinet
- Insulated Cabinet
- Patented Nozzles
- HMI/PLC (excluding PICO model)
- Individual Oxidant Control for each nozzle
- SCADA Connection (excluding PICO model)
- Timer Based Oxidant Control
- Auto-Draining Moisture Removal System
- Pressure & Flow Based Oxidant Shut Off
- Small Footprint
- Low Power Usage
- 1- Year Mechanical Warranty
- Modem & Communication Services
- Ergonomically Designed Pedestal Mount

Benefits

- Treats High Concentrations of Hydrogen Sulfide, Mercaptans, and Amines
- Eliminates Odor Complaints
- Reduces Rate of Corrosion in the Infrastructure
- Remediates Fats, Oils, and Grease
- No Chemical Storage or Handling
- Quiet Operation
- Easy Installation
- Straightforward to Operate
- Environmentally Friendly
  - Reacted chemistry condenses safely back into influent stream
  - Small Carbon Footprint
- Low Installation, Maintenance, and Operational Costs

Applications

- Pump Stations/Wet Wells/ Lift Stations
- Junction Boxes & Siphons
- Interceptors
- Manholes
- Sludge Holding Tanks
- Grease and Scum Pits
- Grit Chambers
- Covered Primary Clarifiers
- Holding, Retention & Equalization Tanks
- Headworks Channels
- Rotary Screens

Options

- Extended Mechanical Warranty
- Quarterly Maintenance Program
- RXN Vent

Specifications	PICO	NANO	MICRO	MILLI
Maximum Treatment Volume, ft^3 (m^3)	750 (21)	10,000 (283)	26,000 (736)	42,000 (1,189)
Maximum Number of Nozzles	1	2	4	6
Oxidant Output, g/hr	≤ 10	≤ 20	≤ 50	≤ 60
Average H_2O Usage, gal/h/nozzle (l/h/nozzle)	1.5 (5.7)	8 (30.3)	8 (30.3)	8 (30.3)
Air Output, cfm/nozzle (m^3/hr/nozzle)	1 (1.8)	20 (34)	20 (34)	20 (34)
Material of Construction*	TGIC polyester powder coated aluminum			
Noise Level, dB	< 65	< 70	< 70	< 70
Average System Weight, lbs (kg)	62 (28)	160 (73)	290 (132)	325 (147)
System Dimensions L in (cm) x W in (cm) x H in (cm)	L: 20 (51) W: 17 (43) H: 31 (79)	L: 41 (104) W: 17 (43) H: 47 (119)	L: 48 (122) W: 32 (81) H: 71 (180)	L: 48 (122) W: 32 (81) H: 71 (180)
Power Requirements				
Volts, VAC	110	110 or 220	220	220
Average Current Draw, A, 50 Hz	3.5	10	18	20
Average Current Draw A, 60 Hz	6	17 or 11	19	23

Contact your Vapex™ Sales Representative or call 1-888-907-0004 to determine which Vapex™ unit is best suited to eliminate odors, remediate FOG, and decrease corrosion for your application.