



•OHxyPhogg[®] ENERGIZED BY **vapex**

Radical Odor Control Technology

Low Energy, In-Situ Hydroxyl Radical Fogger
Effective in Enclosed or Partially-Enclosed Odorous Areas

- No chemicals or bio-solutions required
- Eliminates scrubbers or significantly reduces scrubber load
- Minimal startup cost and easy installation
- Low maintenance

OHxyPhogg® radical odor control technology successfully installed in over 200 applications

Parkson's OHxyPhogg® radical odor control system uses patented air atomizing three-fluid nozzles for incredibly efficient fogging results.

The OHxyPhogg® combines ozone, water and air to create a hydroxyl radical fog that is efficiently dispersed throughout confined spaces, such as lift stations, wet wells, diversion boxes, holding tanks and headwork areas. Hydroxyl radicals, •OH, a fundamental reactant in oxidizing and removing natural and manmade compounds, quickly and efficiently oxidize H₂S, mercaptans and amines, virtually eliminating odor.

Unlike competitive offerings, the OHxyPhogg® does not require the extraction of foul air, but treats the offensive odors in place, thus drastically reducing energy costs. It is self-sufficient, meaning it does not require periodic additions or replacement of chemicals or bio-solutions. This eliminates handling and disposal costs increasing safety and keeping operational and maintenance costs to a minimum.



Ft. Collins, Colorado
Before: 4" grease



Ft. Collins, Colorado
After: < 1" grease



Eliminate Odors

Often referred to as Mother Nature's cleanser, hydroxyl radicals are capable of 90-99% removal of H₂S and other odorous compounds. By quickly oxidizing H₂S, the OHxyPhogg® not only eliminates odors but also the potentially dangerous effects of H₂S. The technology can be customized to meet varying installation requirements. With five models, the ideal unit can easily be sized for your specific application and the hydroxyl radical fog will deliver almost instantaneous odor reduction.

Decrease Corrosion

Hydroxyl radicals are also a strong disinfectant, killing bacteria on contact. Sulfur-reducing bacteria, primarily *Thiobacillus* aerobic bacteria, colonize on surfaces above the waterline. These bacteria metabolize H₂S and oxidize it to sulfuric acid, H₂SO₄. The hydroxyl radical fog covers the entire surface, killing bacteria and preventing sulfuric acid deposits on the surfaces thereby eliminating corrosive attack on the infrastructure.

Prevent Fats, Oils and Grease (FOG)

Hydroxyl radicals break the double carbon bond that form fatty acid chains. These chains create the FOG buildup that many wet wells experience. FOG decreases capacity and affects process in addition to being expensive for removal and disposal. While odor control is often the primary interest, the hydroxyl radical fog is an effective method of preventing grease buildup.



Features

- Easy installation
- Environmentally friendly
- Communication systems
- Remote monitoring
- Startup within hours
- Simple maintenance
- Numerous safety measures
- Rapid reaction with odorous gases
- Corrosion-resistant coated stainless steel enclosure for indoor or outdoor installation

Benefits

- Destroys reduced sulfur compounds, mercaptans, and amines
- Eliminates odor complaints
- Reduces surface corrosion
- Remediates FOG
- No chemical storage or handling required for improved safety
- Reacted chemistry condenses safely back into water stream
- Extensive degree of built-in safety features with ETL certification
- Minimal energy + water usage

Patented, Highly Efficient Atomizing Nozzle

- Generates an average five-micron sized hydroxyl radical fog
- Results in highly effective mist containing water, air and oxidant



Contact Parkson to schedule a demonstration at your facility

Use Mother Nature's cleanser, the hydroxyl radical, to treat your odor challenges

Oxidant	Oxidation (oxidant potential voltage)	Relative Oxidation (potential power)
Fluorine, F	3.06	2.25
Hydroxyl Radical ·OH	2.80	2.05
Atomic Oxygen, O	2.42	1.78
Ozone, O ₃	2.07	1.52
Hydrogen peroxide, H ₂ O ₂	1.77	1.30
Permanganate, MnO ₄ ⁻	1.67	1.23
Chlorine dioxide, ClO ₂	1.50	1.10
Chlorine Gas, Cl ₂	1.36	1.00
Oxygen O ₂	1.23	0.90
Hypochlorite, ClO ⁻	0.94	0.96



OHxyPhogg® offers a very competitive lifecycle cost versus more traditional options

Category	OHxyPhogg®	Carbon Adsorber	Biological Filter	Chemical Scrubber
Chemical or Carbon Costs	None	High cost of carbon replacement	Medium cost for media replacement	High cost for chemical usage
Capital Cost	Low	High	High	High
Energy Cost	Low	High	High	High
Footprint Size	Low	Medium	Medium	Large

Specifications

Specifications	V40	V80	V150	V250	V350
Oxidant Output	0 – 0.4lbs/day	0 – 0.8lbs/day	0 – 1.5lbs/day	0 – 2.5lbs/day	0 – 3.5 lbs/day
H ₂ O Consumption (@ 20 psi)	1 – 6 gph/nozzle	4 – 10 gph/nozzle	4 – 10 gph/nozzle	4 – 10 gph/nozzle	4 – 10 gph/nozzle
Air Output (@ 2 psi)	15 cfm/nozzle	40 cfm/nozzle	40 cfm/nozzle	40 cfm/nozzle	40 cfm/nozzle
System Dimensions	All models have the same dimensions: 45"L x 35"W x 46"H				
Power Requirements	110VAC, 60Hz, 30 Amp	110VAC, 60Hz, 30 Amp	110VAC, 60Hz, 30 Amp	220VAC, 60Hz, 30 Amp	220VAC, 60Hz, 30 Amp



Fort Lauderdale
Chicago
Montreal
Dubai
Mumbai

1.888.PARKSON
odor@parkson.com
www.parkson.com

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