

POLLUTANT DESTRUCTION

Advanced Oxidation Process

Meet your wastewater disposal targets with a highly effective Advanced Oxidation Process. The proprietary chemical mixture of **BIPERLIMINATE™** destroys dyes, sulfides, lignins, toxins, and a wide range of chemical residues, converting them into harmless carbon dioxide, vinegar, other carboxylic acids, and water.

A Biperliminate™ system is a simple mechanical system of a chemical storage tank, reactor, and oxidant. Biperliminate™ is much safer and easier to handle than other AOPs, requiring only the same safety measures as swimming pool chlorine.

Biperliminate™ oxidizes “refractory organics” that are too expensive, difficult and slow to remediate with biology and reduces the COD and BOD of wastewaters.

Biperliminate™ has an operating cost 5-20 times lower than other AOPs and other environmentally unsound methods, such as incineration. UV+peroxide or Ozone are not as safe or easy to handle. Neither are they as selective to polluting organic compounds as Biperliminate™. Our oxidant leaves behind much of the background organics, going after the large polluting molecules it prefers to “eat”. With selectivity, Biperliminate™ can treat more volume with less oxidant, making it the cheapest AOP known.

Biperliminate™ can also be used in the place of ozone to bleach paper and fabrics.

There’s no need to haul away wastes for disposal in another area with an onsite wastewater treatment system. The Biperliminate™ system’s footprint is scaleable, depending on the volume of wastewater. A system treating wastewater of for example 10–100 m³/day would have a footprint including a chemical storage tank of 1.5–5 square meters.

Start with a consultation on your wastewater composition and a pilot run today.



BIPERLIMINATE™



bipurewater.com

BIPERLIMINATE™



BEFORE:
Methylene Blue dye
25 parts per million
(25 mg/L)

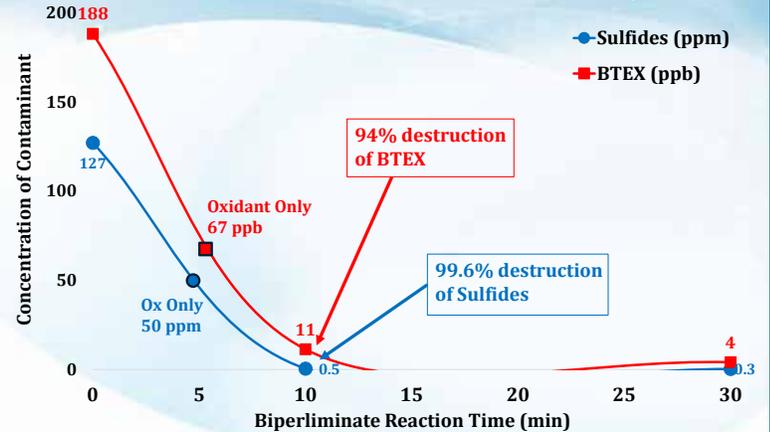
AFTER
Biperliminate™:
>99% destruction
in 10 minutes

- Lowest cost AOP known
- Safer and more energy efficient than ozone
- Methylene Blue dye is a very difficult chemical to remove with most wastewater technologies
- Custom onsite systems are optimized with system and chemistry adjustments (with a process development analysis)
- Selectivity for target toxins against background TOCs and organics such as mud
- Using simple hardware, BIPERLIMINATE™ easily destroys refractory compounds at a much lower cost than competing methods, including GAC

Sulfides in BC Municipal Landfill Leachate

Replaces current H₂S treatment and destroys primary pollutant BTEX to less than detectable limit

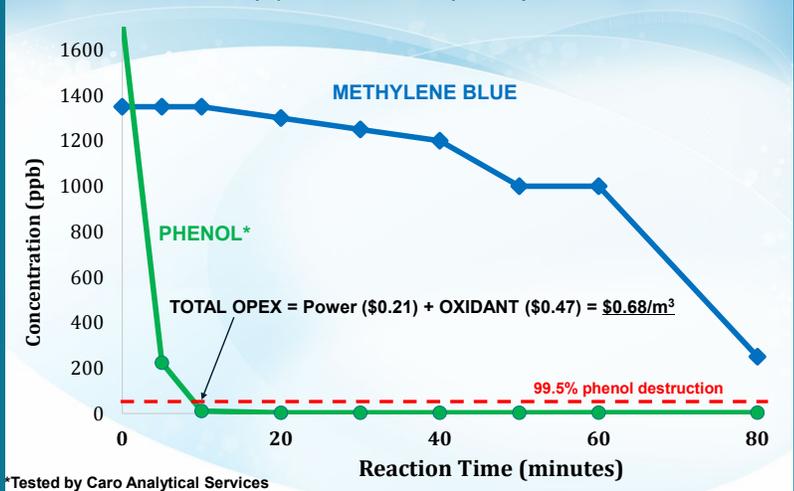
Biperliminate™ Destruction of Sulfides + BTEX in Landfill Leachate (BC Municipality), 60 cents/m³ oxidant
99.6% destruction of Sulfides and 94% of BTEX in 10 min of Biperliminate™



Methylene Blue in Textile Industry

Methylene Blue is a more difficult compound than pharmaceuticals

Biperliminate™ selectively and easily destroys >99.7% of phenol
Selectivity (reaction rate ratio) >50:1 for Phenol vs MB



*Tested by Caro Analytical Services

See our CASE STUDIES:

<http://bipurewater.com/advanced-oxidation-process/>



20+ years
Award winning design & manufacture

info@bipurewater.com
Toll-free: 1-888-901-3111
#2 - 9790 190th Street
Surrey (Vancouver), BC, Canada

bipurewater.com