INDUSTRIAL SUPERCritical WATER OXIDATION

- Safe, proven, environmentally sound
- High efficiency at low cost
- Emissions much lower than incineration
- Transportable, skid-based system

Safe, effective destruction of energetics, organic compounds, chemical waste, pesticides, petrochemical waste, and fungicides
General Atomics Electromagnetic Systems (GA-EMS) Industrial Supercritical Water Oxidation (iSCWO) technology has been successfully used to treat a broad range of hazardous and non-hazardous waste, with a 99.99% destruction removal efficiency. iSCWO provides a safe, environmentally sound solution to replace alternative technologies that have high emission rates, post treatment requirements, and substantial installation and operation costs.

In addition to offering a fixed site solution, GA-EMS offers the only flexible, transportable iSCWO system available today to facilitate “generate and destroy” on-site capabilities. The system consists of two compact equipment skids housed inside two shipping containers to create a convenient, cost effective, mobile platform for waste destruction when and where it’s needed.

GA-EMS’ iSCWO system uses compressed air rather than more expensive pure oxygen (O2) in the treatment process. The iSCWO process makes most organic materials, oxidation reactants, and oxidation products miscible in water, allowing complete oxidation reactions to take place at a high rate. The result is the creation of CO2, water and salts, all of which can be released into the environment or reused for other industrial purposes without any post treatment. NOx, SOx, and particulate concentrations created are also at or below detection limits.