

Amplicon Decontamination Services

Overview: The Ecosense Company decontaminates rooms, equipment and confined spaces where DNA and RNA amplification or sequencing is performed. We routinely decontaminate polymerase chain reaction (PCR) analysis equipment on an emergency basis or as a precautionary measure.

We offer on-site decontamination services as well as convenient off-site contract sterilization services. Our decontamination process is performed using ClorDiSys chlorine dioxide generation equipment and their EPA approved sterilant. The decontamination treatment is conducted following ClorDiSys' proven operating protocol for the inactivation of amplicons. After completion of each treatment, customers receive a comprehensive report validating the procedural, chemical and biological results.

Summary: ClorDiSys chlorine dioxide gas effectively eliminates amplicons on equipment, or in facilities, so that there is no risk of cross-contamination. Post-treatment, the equipment or facilities can be used without the risk of compromising the integrity of future research results.

The ClorDiSys technology is ideally suited to address the unique challenges associated with eliminating amplicon contamination. Amplicons can persist on surfaces for days or weeks, multiplying and binding to subsequent DNA research projects in the process. This common issue leads to inconsistent readings and false test results. Complicated by the microscopic nature of amplicons, contamination often resides in cracks and crevices that traditional cleaning methods fail to adequately address.

Chlorine dioxide gas inactivates amplicons in a non-invasive and non-corrosive manner. As a true gas with a molecular size of approximately 0.124 nanometers, contamination residing in even the most remote area is eliminated. The ClorDiSys process uses a precise photospectrometer to insure that the proper concentration level is achieved and maintained for the duration of the decontamination treatment.

The ClorDiSys chlorine dioxide gas decontamination process has been independently validated by two major PCR equipment manufacturers. The Ecosense Company can perform decontamination at an end user's site, a PCR service facility, or at the Ecosense facility in Ohio. Additional details, including a contract sterilization RFQ form, is available on our website at www.ecosensecompany.com.