



## Datacenter Environmental Contamination – Case Study



Coastal Technical Services (CTS) recently completed consulting and restoration services for a large Federal Government datacenter. After the datacenter became operational with a large quantity of networking and storage units in place, the datacenter employees noticed a residue accumulating on the equipment surfaces. The residue was traced back to the building environmental control systems.

After the environmental issues were corrected, CTS was tasked with assessing the potential risk of the residue contaminants. Following testing and internal inspection of the equipment, it was determined that the contaminants raised the risk of premature equipment failures. A majority of the equipment was supported by three Original Equipment Manufacturers (OEMs): *HP*, *Cisco*,

and *NetApp*. CTS had already established programs with both *HP* and *Cisco* for the risk assessment and removal of contaminants. In these programs, CTS utilizes manufacturing industry testing and acceptance standards to develop a cleaning protocol. CTS will return the equipment to pre-loss status and therefore aid in the acceptance of the equipment back into service and maintenance coverage. Both *Cisco* and *HP* agreed with CTS's determination that the contaminants on the equipment should be removed. *NetApp* was also contacted and presented with the same inspection and cleaning data. *NetApp* sent technicians on-site to work alongside CTS in order to maintain service contract status.

Once work on the three main OEMs commenced, CTS contacted the several dozen other OEMs for the remaining equipment. This included: *IBM*, *Dell*, *Hitachi*, *Niksun*, *Stonesoft*, etc. Most agreed to have CTS perform a similar restoration protocol on their equipment and to keep the equipment under the pre-loss service status. A few of the OEMs had CTS clean the equipment on-site and send it to them for further testing, all of which was successful.

The project was a success. CTS performed the restoration on-site and consistently met required time schedule milestones. Alongside OEM qualified technicians, CTS opened, inspected, and

cleaned about 15,000 individual parts and performed post-clean functional testing and chemical analysis. Nearly all equipment now maintain their original service and maintenance status with dozens of participating OEMs.

This case study is an example of how CTS can leverage its experience and expertise to work directly with OEMs and ultimately benefit all involved parties. Due to the on-site cleaning performed by CTS:

- *OEMs were able to maintain warranty and service contracts without risk of premature failure.*
- *The system-owner minimized business interruption and retained service coverage of equipment. Furthermore, long-term reliability was maintained.*
- *The lead-time associated with replacing equipment was eliminated, enabling the datacenter clients to meet critical milestones with global significance.*
- *The cost of remediation was 95-97% LESS than full replacement, for a total savings of over \$70 million.*

*CTS provides consulting and engineering services for electronic and electromechanical equipment that has been affected by a contamination event. (Fire, Flood, Concrete/Construction dust, etc.)*

*When you have claims that include electronics or electromechanical equipment, call the professionals at CTS.*

**800-662-2627**