

MICRO AIR RP8-2 (16 Cartridge) **Dust Collector on Combustible and Hazardous Dust at Recycling Facility**

CLEAN AIR SOLUTION REPORT

Application: Dust Generated at Recycling Facility.

Contaminants Are Potentially Explosive and Also

Contain Lead.

Location: **Southern California**

Products: Micro Air RP8-2 (16 Cartridge) Dust Collector equipped

with Intelli-Touch, Explosion Vents, Back-Blast Damper,

and Safety Filter (99.97% DOP HEPA)

Challenge: A major recycling operation was generating dust in the process of crushing and recycling electronic components such as computer monitors. TVs and other outdated equipment. The dust being generated had small amounts of lead and per the regulating body in Southern California, the dust had to be filtered prior to release to the atmosphere. In addition, the dust con-



tained some components that were combustible in nature. The customer not only needed to meet California's stringent emissions standards, but also wanted to comply with the new OSHA Combustible Dust Emphasis Program. In an effort to remain "green", the end-user also wanted to minimize it's energy consumption and consumable costs.

After consulting with the exclusive Southern California Micro Air distributor, Air Cleaning Technology, it was determined that the best solution to meet all of the customer's requirements would be an RP8-2 Dust Collector equipped with Micro Air's exclusive Intelli-touch control panel. The Intelli-touch control panel automatically varies the frequency of the motor/blower on the system to only use as much brake horsepower as is required based on changing loading conditions. Intelli-Touch not only saves 20-30% of the electricity costs associated with running the system, it makes sure the system is running at ideal "design conditions" 100% of the time, thereby maximizing filter life and compressed air usage. The dust collector was also equipped with explosion vents and an inline back-blast damper to comply with OSHA and NFPA requirements for combustible dust. Because lead was present in the dust, the unit was required to have a 99.97% DOP rated Hepa "safety" backup filter. This ensures a redundancy should there ever be a problem with the primary cartridge filters.

Micro Air Advantage: Using Micro Air's exclusive Roto-Pulse filter cleaning system and REDMAX cartridge filters, the system effectively removes 99.999% of the dust brought into the dust collector and helps the end user maintain low operating costs while meeting the most stringent air quality standards of today and into the future. The Micro Air *Intelli-Touch* control panel further reduces electrical demand by as much as 30% through a variable frequency drive system and automatically controls operating conditions in the dust collector to maintain maximum efficiency through maintaining ideal operating conditions. This also extends filter life by as much

as 40-50% over traditional operating systems.





Explosion Rated Barrel Lids



In-Line Back-Blast Damper





Customized HEPA Safety Filter

Phone: 866-566-4276 Fax: 316-219-2995

Email: info@microaironline.com

http://www.microaironline.com

Micro Air **PO Box 1138** Wichita,