

Combustible Dust- What a Contractor Needs to Know

Jeff Almond, Duke Energy

Chris Chaney, PSEG Services Corp

Gary Babaryk, MPW Industrial Services



Edison Electric
INSTITUTE

Techniques for Safe Elimination of Combustible Dust

Gary Babaryk
Area Sales Manager, MPW Industrial Services
EEI Spring Safety & Health Conference
May 2016
Philadelphia, PA

Foam Cleaning

With virtually limitless applications, foam cleaning can remove combustible and non-combustible dust, dirt, oil, grease and more. MPW's foam cleaning helps eliminate fire hazards by using non-flammable chemicals.

Features

- 100 percent biodegradable
- Non-flammable
- Non-corrosive, neutral pH, and environmentally-friendly
- Adjustable between “wet and dry” foam
- Increased “hang time” allows more contact with surface areas
- High-expansion foam provides maximum coverage with minimal moisture addition

Foam Cleaning



Benefits

- Decreases safety-related incidents
- Lack of irritating or harmful odors yield a safer work area
- Fewer man hours dedicated to scrubbing, power washing or rinsing
- Prevents or shortens shutdowns
- Custom-made to meet your specific needs

Mormar Coalrol F430

- Binds dust fines together, reducing fugitive dust emissions
- The low-moisture foam properties reduce the risk of shorting out electrical components during on-line facility cleaning applications
- Anti-static properties dissipate electrostatic energy on treated surfaces and anti-oxidant properties scavenge free radicals to help prevent the conditions that lead to explosions in coal dust areas
- Unique cationic surfactant chemistry attracts negatively charged coal dust particles, improving cleaning and dust reduction

Vacuuming Services

MPW's dry and wet vacuum cleaning solutions manage the safe removal, transport and disposal of nonhazardous wastes from job sites, including remote or inaccessible areas. Our fleet consists of Transport tankers, Supersuckers and dry and wet maxi TurboVacs. Many units are equipped with the latest SCR technology, allowing our trucks to operate in enclosed facilities without the accumulation of exhaust within the building.

Features

- Payload capacity of 18 cubic yards
- Positive displacement vacuum pumps providing 5,000-6,000 CFM of airflow
- Static ground cable
- Temperature gauges inside and outside for continuous monitoring

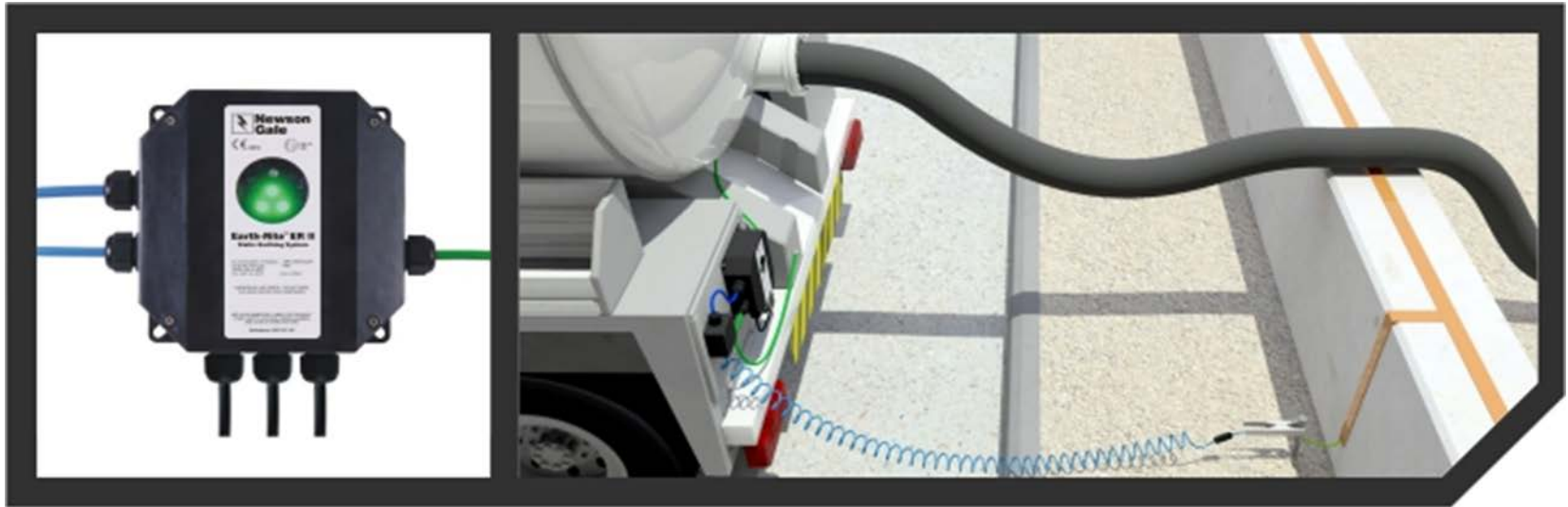
Vacuuming Services

Benefits

- Decreases safety-related incidents
- High-powered airflow solution to pick up the toughest solids and liquids
- Single-mode filtration enables loading of wet or dry materials with no changeover



NewsonGale Earth-Rite MGV



Vacuum trucks, including their hoses and hose connections, are susceptible to static charge accumulation during the transfer of product into or out of the truck's containment system. This accumulation of static charge is equivalent to a hidden source of ignition and if discharged as a static spark can lead to the ignition of the product or the atmosphere in which the truck and material handling team is operating.

NewsonGale Earth-Rite MGV

- The Earth-Rite MGV automatically verifies if the truck is connected to a ground source that is connected to the mass of the earth
- It will monitor the resistance between the verified ground source and the truck so that if exceeds 10 ohms the green LED indicators will switch from pulsing green to red
- Internal dry contacts can be utilized to shut down the movement of liquid or powder if the Earth-Rite MGV detects that ground connection is not present
- Site electricians do not need to perform a one-time check with a meter. The Earth-Rite MGV will not only perform this check automatically for the driver, it will continue to monitor the connection for the duration of the transfer operation

Superproducts Wet Ring Vac-Line Attachment

- Attaches to a water source
- Injects water into vacuum line when picking up dry, powdery material
- Reduces dust and carryover
- Reduces temperature of hot material
- Steel construction
- Includes valve and quick disconnect



Goodway Industrial Vacuum HEPA

The DV-AV9-EX Explosion proof vacuum includes industrial power with HEPA filtering and UL certification for use where explosive and hazardous materials are present like fine powders, coal dust, flammable dust and more.

Powered by compressed air, this explosion-proof industrial vacuum is capable of dry pickup including filtering to 99.99% down to .03 microns. It also includes an external shaker to make sure it keeps filters clear of clogs.

Goodway Industrial Vacuum HEPA



Features

- Grounding cable
- Anti-static filter
- External filter shaker
- 9-gallon non-sparking stainless steel detachable tank with handles, casters and a tool basket

Cable Trays

Custom-designed and fabricated by MPW's engineering team, MPW's cable tray system eliminates combustible dust by mixing medium air pressure with high vacuum pressure in the nozzle inlet. This removes the dust and debris from between the cables and through the nozzle outlet, ensuring that little to no airborne dust escapes the area. This procedure is safe for use on live wires.



Case Study



Before



After

Questions?

