Volume 5 Issue

May 2015



this issue Best-in-Class

"The final forming of a person's

- Anne Frank

Thoughts

character lies in their own hands.'

"Because power corrupts, society's demands for moral authority and character increase as the importance of the position increases."

– John Adams

"Accountability breeds responseability."

- Stephen Covey

Biannual River Cleanup - Bristol, CT

Note from Leanne P.1

Equipment Decontamination P.2

Clean Hands Save Lives P.3

Eason Diving Decontamination P.4

Note from Leanne

Through the years, as our safety culture has evolved and matured, we've taken several opportunities to reflect on various components of successful safety cultures. At this stage of our growth, we're well beyond the good vs. bad safety culture discussion, so really, the question is this: what's the difference between companies with good safety cultures and those with great safety cultures?

There's likely no one "right" answer to that question, but most companies that have found significant success in building their safety culture have done so by understanding the relationship between responsibility, authority and accountability with regards to individual safety and the impact that it has on the overall safety of a company.

The components of the triad are simple:

- 1. Each of us is responsible for our own safety and the safety of those around us; we exercise this responsibility by acting safely and following established safety rules.
- 2. Each of us has the authority to stop activity that poses a danger to us and those around us; in the MER Family of Companies, this is called Stop Work Authority and every employee has the right to exercise this authority.

3. Each of us should be held accountable for our actions and inactions; this accountability comes in several forms, i.e. promotions, employee recognition, safety disciplinary action, etc.

The premise of the relationship is that everyone needs to have all three components in order to be successful; those components will vary depending on where an employee falls in our company's organizational structure (Field Technician, Supervisor, CEO etc) but ultimately, everyone has some level of responsibility, authority and accountability with regards to health and safety.

In the end, if we stay disciplined and implement all three components at the individual level, this relationship will allow us a better opportunity to grow beyond a good safety culture and reach our ultimate goal of a Bestin-Class safety culture.



Focus on Safety

Did You Know?

Never use Tygon sample tubing with PIDs because it quickly absorbs many chemical vapors. Tygon tubing can reduce the PID readout when measuring many chemicals and may cause "false positives" when chemicals do not exist due to "outgassing" of old chemicals from the tube.

Use Teflon, Teflon-lined or similar non-reactive tubing with PIDs. Teflon tubing will not absorb chemicals, but it can get coated with contaminants. Clean contaminated Teflon tubing with anhydrous methanol (lamp-cleaning solutions).

www.raesystems.eu 3.

Decontamination

Decontamination is the process of removing or neutralizing contaminants that have accumulated on personnel and equipment; it is critical to health and safety, especially when handling hazardous material or wastes. Decontamination is necessary to:

- Protect workers from hazardous substances that may contaminate and eventually permeate the protective clothing, respiratory equipment, tools, vehicles, and other equipment used on site
- Protect all site personnel by minimizing the transfer of harmful materials into clean areas
- Help prevent mixing of incompatible chemicals
- Protect the community by preventing uncontrolled transportation of contaminants from the site

Decontamination methods either

- 1. Physically remove contaminants
 - Dislodge/displace, rinse, wipe off, and/or evaporate.
- Inactivate contaminants by chemical detoxification or disinfection/sterilization.
 - Chemical Detoxification: halogen stripping, neutralization, oxidation/reduction, thermal degradation.
 - Disinfection/Sterilization: chemical disinfection, dry heat sterilization, gas/vapor sterilization, irradiation, steam sterilization.
- 3. Remove contaminants by both physical and chemical means



www.osha.gov/SLTC/hazardouswaste training/decon.html

Cleaning Atmospheric Monitors

In our industry, atmospheric monitors are exposed to a variety of chemicals and dirty environments, which occasionally end up contaminating them, internally and externally. Those who use and maintain air monitors know that the sensors must be kept clean and in good condition otherwise the sensors can malfunction; for example, the lamp inside the PID sensor can be cleaned with a PID Cleaning Kit if the readings appear inaccurate. There are specific methods and products to clean atmospheric monitors' sensors, but how do clean the outside of a gas detector without causing damage?

Always follow the manufacturer's recommendations for cleaning the instrument listed in the operators' manual. In most cases, you find that the manufacturer instructs the avoidance of several cleaners, solvents, and lubricants because they can contaminate and cause permanent damage to sensors. In general, adhere to the following:

- Remove the battery. (Clean connectors with soft cloth. Do not use solvents or cleaners on battery terminals or connections.)
- Clean the exterior with a soft, damp cloth.
- If using cleaner, ensure the sensors are protected or removed.
- Use water-based, non-alcohol based cleaners. Do not use soaps, polishes, or solvents. Avoid the following:
 - <u>Cleaners & Lubricants</u>: Brake cleaners; Lubricants; Rust inhibitors; Window/glass cleaners; Dish soaps;
 Citrus based; Alcohol based; Hand sanitizers; Anionic detergents; Methanol (fuels and antifreezes)
 - <u>Silicones</u>: Silicone based cleaners, protectants, adhesives, sealants, and gels; Hand/body and medicinal creams; Tissues; Mold releasing agents; Polishes
 - · Aerosols: Bug repellents and sprays; Lubricants; Rust inhibitors; Window cleaners
- After cleaning, allow monitor to completely dry; calibrate instrument.

www.honeywellanalytics.com - BW MicroClip XT Operator Manual

















Water-based hand cleaners, such as SCRUBS® in a Bucket Hand Cleaner Towels, are great tools to assist in the decontamination of air monitor exteriors. Of course, you should always remove the sensors and batteries to avoid contact prior to cleaning, as well as ensure the air monitor is completely dry before replacing them.



Clean Hands Save Lives

Handwashing is like a "do-it-yourself" vaccine—it involves five simple and effective steps (Wet, Lather, Scrub, Rinse, Dry) you can take to reduce the spread of diarrheal and respiratory illness so you can stay healthy. Regular handwashing, particularly before and after certain activities, is one of the best ways to remove germs, avoid getting sick, and prevent the spread of germs to others.

Handwashing with soap helps prevent infections because:

- People frequently touch their eyes, nose, and mouth without even realizing it. Germs can get into the body through these mucous membranes and make us sick.
- Germs from unwashed hands can get into foods and drinks while people prepare or consume them. Germs can multiply in some types of foods or drinks, under certain conditions, and make people sick.
- Germs from unwashed hands can be transferred to other objects, like handrails, table tops, or toys, and then transferred to another person's hands.



 Removing germs through handwashing therefore helps prevent diarrhea and respiratory infections and may even help prevent skin and eye infections.

Teaching people about handwashing helps them and their communities stay healthy. Handwashing education in the community:

- Reduces the number of people who get sick with diarrhea by 31%
- Reduces diarrheal illness in people with weakened immune systems by 58%
- Reduces respiratory illnesses, like colds, in the general population by 21%

Fitness Challenge 30 DAY BEACH BOD 2 DAY 1 **DAY 16** 50 LUNGES 50 DONKEY KICKS INCHES ECOND PLANK DAY 2 35 PUSH UPS 100 MOUNTAIN CLIMBERS SECOND PLANK **DAY 17** DAY 3 **DAY 18** 50 BURPEES 50 KICK DOWN CRUNCHES DAY 4 **DAY 19** DAY 5 PEES ECOND PLANKS CLE CRUNCHES DAY 6 **DAY 21** DAY 7 **DAY 22** PEES ANDING SIDE CRUNCHES **DAY 23** DAY 8 IGES ATER SLIDES DAY 9 **DAY 24** JATS CATER SLIDES D CHOPS Untain Climbers DAY 10 **DAY 25** CLE CRUNCHES **DAY 11 DAY 26** DAY 12 DAY 13 DAY 14 **DAY 30**

How should you wash your hands?

- **1. Wet** your hands with clean running water (warm or cold), turn off the tap, and apply soap.
- 2. Lather your hands by rubbing them together with the soap. Be sure to lather the backs of your hands, between your fingers, and under your nails.
- **3. Scrub** your hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice
- **4. Rinse** your hands well under running water. Point fingers down so water and contamination won't drip toward elbows.
- 5. Dry your hands using a clean towel or air dry.

Note: When hand washing facilities are not available, use an appropriate antiseptic hand cleaner or towelettes (alcoholbased hand sanitizer with at least 60% alcohol is recommended). As soon as possible, rewash hands with soap and running water.

http://www.cdc.gov/handwashing/

Not Washing Hands Harms Children Around the World

- About 2.2 million children under the age of 5 die each year from diarrheal diseases and pneumonia, the top two killers of young children around the world.
- Handwashing with soap could protect about 1 out of every 3 young children who get sick with diarrhea and almost 1 out of 6 young children with respiratory infections like pneumonia.













Spotlight



Eason Diving Decontamination

The MER Family of Companies performs a wide range of services in several different industries; the expansive variety of activity exposes our employees to varying degrees of contamination every day from dirt and other benign contamination found on the surfaces of public transportation to high hazard contamination such as the waste found in spent nuclear reactor fuel tanks and everything in between.

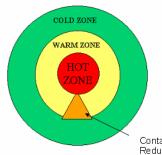
With all of that potential contamination, our employees are required to be well versed in the various types of decontamination (decon). Some decon processes are elaborate and involve several stages of decontamination while others are simple, utilizing one or two steps to achieve cleanliness.

Though decontamination probably isn't the first thought to enter the mind when hearing the name Eason Diving and Marine Contractors (Eason), decon is actually of the utmost importance during diving operations, especially after working inside wastewater or spent nuclear reactor fuel tanks. Eason's divers spend approximately 30-40 days per year in wastewater tanks and about

20-30 days per year in spent nuclear reactor pools to inspect and repair submerged parts, as well as perform sludge and solids removal (from wastewater tanks). Eason must work closely with each client to ensure proper procedures are followed during the work as well as the decontamination process to ensure employees are not exposed to contaminants up to and including ionizing radiation. Not surprisingly, decontamination procedures for underwater activities are similar to decon process of above ground

> work, such as a Level A decon. It begins with setting up the zones: Hot Zone (the pool or tank), Warm Zone, or also known as the Contamination Reduction Zone (CRZ), and the Cold Zone (clean area). Prior to leaving the Hot Zone, or pool/tank, divers remain on the egress ladder and are rinsed. Once they enter the CRZ, a gross decon that include solids removal is per-

formed along with more rinsing/wiping with appropriate solutions, such as antibacterial spray or demineralized water and plenty of clean towels. Once the outer PPE is deemed clean it can begin to be removed, and just as a respirator face piece is removed last during a Level A decon, the helmet is removed last for divers.



DIRECTION

Contamination-Reduction Corridor

Values

Professionalism

Integrity

Mutual Respect

Discipline

Employee Development

How do you teach basic proper decontamination and PPE removal? There are several methods to teach proper decontamination, but perhaps the most effective method is to actually contaminate (with a safe product, of course) a person while they are wearing their PPE and test their ability to decon without getting the contaminant on their skin and clothes. MER uses this approach, however, we like to take it to the next step by utilizing tool that is invisible in normal lighting, but can be detected with an ultraviolet light. The contaminant cannot just be wiped away; it stays on the

skin until it is properly washed. The use of the tool provides an eye opening experience for employees who remove their PPE or wash their hands after improperly. This effective training method shows employees that hazards cannot always be seen and demonstrates the importance of following proper decon procedures including always washing their hands after removing PPE.



MORAN ENVIRONMENTAL RECOVERY LLC Safety Brief

> PHONE (251) 284-1525

FAX (866) 311-4762

EMAIL safety@ moranenvironmental.com

To receive the Monthly Safety Brief via email, send request to the address above.











