

Best-In-Class Thoughts

"Strive not to be a success, but rather to be of value."

– Albert Einstein

"Life is 10% what happens to me and 90% of how I react to it."

– John Maxwell

"Whether you think you can or you think you can't, you're right."

– Henry Ford



this issue

Safety Data Sheets Online **P.1**

Tire Blowouts **P.2**

Immunizations **P.3**

Level A Response **P.4**

Note from Leanne

Hindsight's 20/20; for those not familiar, the saying essentially means that once an event has happened, we are blessed with the ability to look back, have a full understanding of that event, and likely, can see that different choices would have improved the outcome of that event. The truth of that cliché is made painful by the fact that often, the opportunity to utilize that knowledge is limited due to the low probability of a reoccurrence of such an event.

At MER, because of our network of Resource Centers and Family of Companies, we don't have that problem. Good Catches, incident investigations, Site Assessments and similar tools provides us with a catalog of peer-supplied lessons learned to help us prevent repeat outcomes of injuries, equipment damage and other operational losses. Hindsight is 20/20. Let's use the tools we have in place to ensure we have a clear vision of an incident-free future as well.

Safety Data Sheets Online

What is a SDS? A Safety Data Sheet (SDS), formally called a Material Safety Data Sheet (MSDS), is a document that gives detailed information about the nature of a chemical, such as physical and chemical properties, health, safety, fire, and environmental hazards of a chemical product.

Who are they for? They are designed for:

- Workers who may be exposed to hazardous materials
- Response personnel who may have to clean up a spill or release

Needless to say, SDSs are a vital part of MER's daily operations.

So, where can you find Safety Data Sheets?

MER uses a website called MSDS Online (www.msdsonline.com), which contains an online database of SDSs for all of MER's resource centers. The SDSs are stored and separated into eBinders designated for each MER resource center for easy printing; although the entire eBinder can be printed if desired. MSDS Online allows any employee to access our eBinders or search for new SDSs and add them to the eBinder for their location. Because it's online and requires no software, the site can be accessed 24/7, even from mobile devices.

As we move forward with compliance of the new Globally Harmonized System (GHS) system, MSDS online will play an important role in the collection of new SDSs, as well as helping with the required labels. Contact the Health and Safety Team to ensure you have the correct log-in information to access the site.



GHS

Tire Quick Checks

Inflation

- Worn in middle = over inflated
- Worn on side = under inflated

Tread Depth

The Quarter Test



Insert a quarter into your tread groove. If the tread touches Washington's head, you have at least 4/32 inch of tread remaining.

Tire Blowouts

In the past 18 months, there have been four Air Mover incidents resulting in a floater steer tire blowout. Fortunately, no serious injuries occurred; however, the significance of these incidents cannot be overlooked. Below is a summary of the information collected during the incident investigations, as well as ways to prevent future tire blowouts.

All four incidents occurred in the southern states during hot weather conditions; heat is believed to be a primary contributing factor. Other possible causes / contributing factors are:

- Deterioration of envelope (tire casing – what you see) exposing the plies (metal) or the belts of tires to contamination by air, humidity, or product
- Under-pressurized tires (below 80% of the recommended pressure)
- Mechanical impact that damaged the tire's structure
- Driving with over-pressurized tires
- Loss of mechanical properties due to heat, pyrolysis (chemical decomposition by heat) or thermo oxidation
- Overloading
- Significant carcass wear
- Design defect in weave of the tire cord
- Excess speed – tires rated for 65 mph

Plan of action for Drivers and Operators

- Open the hood to release heat when parked on job sites for multiple hours/days
- Proper decontamination of tires and rims
- Check tires periodically if truck doesn't leave site
- Check parking surfaces – watch for large rocks, metal parts, holes, debris, etc.
- Note tire inspection details on DVIR
- Driver or mechanic can check the inflation to ensure 120 psi for heavy equipment tires
- Adhere to the Gross Vehicle Rated Weight (GVRW): The weight a vehicle is designed to carry; the combined weight of the vehicle, passengers, fuel, cargo, and towing capacity.

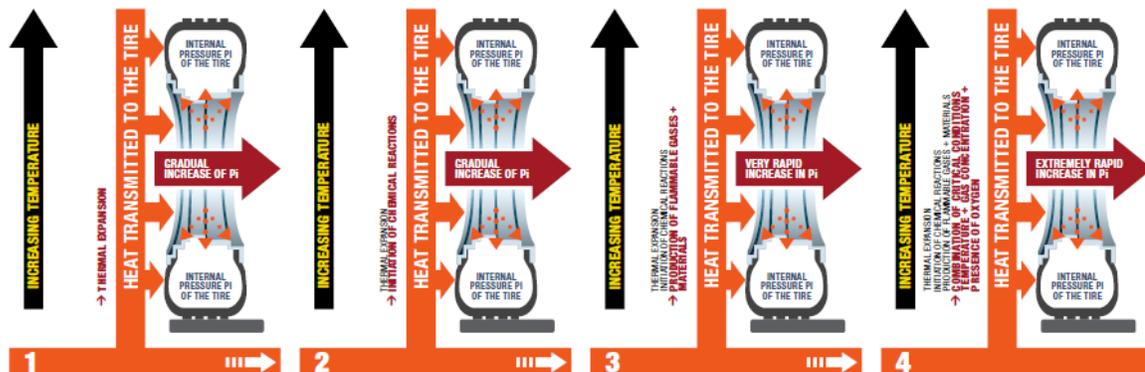
Plan of action for Fleet Maintenance

- Air water separators in shop compressors (to reduce moisture during tire inflation)
- Evaluate 300, 400, 500 series tires
- Replace floater steer tires at 8/32" instead of 4/32"
- Mechanics need to inspect tires involved in minor incidents (e.g. bang off a curb or run over object)

Responding to a Tire Blowout

- No brakes! Keep your foot on gas and apply if needed.
- With both hands on the wheel, steer vehicle straight.
- Once you're in control, gently correct steering.
- Don't use more than minimal braking to slow down.
- Pull off road after your speed is reduced.

Watch Truck Tire Blowout by Crash Forensics for an example!
<http://www.youtube.com/watch?v=8znCgvHmb-g>



1 Heating of the air in the tire, which expands and causes an increase in pressure: risk of tire blowout.

2 When heated to around 185°C (this temperature may correspond to air temperatures in the tire as low as 100°C), the rubber begins to degrade, producing flammable gases and materials, further increasing the pressure in the tire: risk of tire blowout.

3 If the heat buildup continues, the accumulation of flammable gases and materials due to degradation of the rubber continues.

4 When the critical concentration of flammable gases and materials is reached in the presence of oxygen at auto-ignition temperature and pressure : explosion occurs.

There's an App for that!

My Fitness Pal

Reach your weight loss goals with MyFitnessPal. Set a daily calorie goal & record your daily food and exercise to make sure you stay on track. Then watch the pounds come off!

Immunizations

Diseases that vaccines prevent can be dangerous, or even deadly. Vaccines greatly reduce the risk of infection by working with the body's natural defenses to safely develop immunity to disease. To understand how vaccines work, it is helpful to first look at how the body fights illness. When germs, such as bacteria or viruses, invade the body, they attack and multiply. This invasion is called an infection, and the infection causes the illness. The immune system uses several tools to fight infection. The first time the body encounters a germ, it can take several days to make and use all the germ-fighting tools needed to get over the infection. After the infection, however, the immune system remembers how to protect the body against that disease; the body keeps a few memory cells that go into action quickly if the body encounters the same germ again.

Vaccines help develop immunity by imitating an infection. This type of infection, however, does not cause illness, but it does cause the immune system to produce antibodies. Once the imitation infection goes away, the body is left with a supply of "memory" cells that will remember how to fight that disease in the future.

Some people believe that naturally acquired immunity—immunity from having the disease itself—is better than the immunity provided by vaccines. However, natural infections can cause severe complications and be deadly. This is true even for diseases that most people consider mild, like chickenpox. It is impossible to predict who will get serious infections that may lead to hospitalization. Even with advances in health care, the diseases that vaccines prevent can still be very serious – and vaccination is the best way to prevent them. <http://www.cdc.gov/vaccines/>

Wellness Tip

Floss once a day.

Brushing cleans the surface of your teeth. You need to floss in order to clean out the gaps between your teeth, where bacteria often reside. If you don't floss, you're more likely to have plaque build-up, which can lead to cavities, tooth decay, and gum disease. If left untreated, gum disease can be a risk factor for heart disease, diabetes, and a high body mass index. In addition, bacteria can cause bad breath and having food or debris between your teeth can make them look less clean or white. Thus, flossing can help improve the appearance of your mouth as well as your dental hygiene and overall health.

Fitness Challenge

Run 300 Yards in 1 Minute

Whether you're chasing down a purse snatcher or running the fast break, every once in a while a man just needs to bust it. If you can cover 300 yards in 60 seconds, you have the speed and drive you need for just about anything.

The Test: Run as fast as you can between two lines spaced 25 yards apart. Do six round-trips, for a total of 300 yards.

The Scorecard:

More than 70 seconds: Slow
60 to 70 seconds: Ordinary
Less than 60 seconds: Fast and agile

<http://www.menshealth.com>

Recommended Immunizations for Adults

Talk to your doctor/ nurse about vaccines	Age					
	19-21	22-26	27-49	50-59	60-64	65+
Influenza (flu)	Get a flu vaccine every year					
Tetanus, diphtheria, pertussis (Td/Tdap)	Get a Tdap vaccine once, then a Td booster vaccine every 10 years					
Varicella (Chickenpox)	2 doses					
HPV Vaccine for Women	3 doses					
HPV Vaccine for Men	3 doses	3 doses				
Zoster (Shingles)					1 dose	
Measles, mumps, rubella (MMR)	1 or 2 doses					
Pneumococcal	1-3 doses					1 dose
Meningococcal	1 or more doses					
Hepatitis A	2 doses					
Hepatitis B	3 doses					
Color Legend:	No recommendation		Recommended for all adults who have not been vaccinated, unless your doctor or nurse tells you that you cannot safely receive the vaccine or you do not need it.		Recommended for adults with certain risks related to their health, job or lifestyle that put them at higher risk for serious diseases. Talk to your doctor or nurse.	

<http://www.cdc.gov/vaccines/schedules/downloads/adult/adult-schedule-easy-read.pdf>



Values

Professionalism

Integrity

Mutual Respect

Discipline

MER's Atlantic Beach, FL office recently responded to a suspected chlorine release at a Jacksonville, FL area power generation facility. A 150-lb chlorine cylinder had been discovered 'hot' with its paint coating bubbling. Due to the building pressure within the cylinder, our client mobilized MER to aid in the response. MER dispatched a trained crew and our Level A response trailer, to work with the Senior Environmental Scientist we had sourced for the response.

Within 60 minutes of notification, MER personnel were on-site assessing the situation for potential hazards. MER equipped two personnel with Level A gear and 60-minute SCBAs to shut down the chlorination system, and remove/contain the affected cylinder. Decon showers were used to help remove any remaining chlorine, and to reduce the weight of the cylinder prior to removal from the area. Once complete, the cylinders were contained within a drum of cooled water and prepared for off-site shipment. The entire response was completed within 3.5 hours of initial notification, and root cause analysis has been performed with the environmental consultant and client to understand

contributing factors leading up to the event.

Overall, it was a safe and successful response that is a great demonstration MER's capabilities. Great job team!

Level A Response



When do you use Level A PPE?

When the greatest level of skin, respiratory, and eye protection is required; it includes:

- Positive pressure, full face-piece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA
- Fully-encapsulating chemical-protective suit
 - Coveralls
 - Long underwear
 - Gloves, outer, chemical-resistant;
 - Gloves, inner, chemical-resistant
- Boots, chemical-resistant, steel toe and shank
 - Hard hat (under suit)



Employee Development Corner

Monthly Skills Development

Recently, MER field employees participated in the Confined Space Rescue Proficiency Evaluations. To continue growing the CSR program, MER will be beginning Monthly Skills Development Activities designed to help employees keep their skills current. These activities include, but are not limited to: knot tying, patient packaging, patient assessment, atmospheric monitoring, and personal protective equipment. The activities will be run by the local CSR Specialist, the Safety Team, or a designated representative. Employees that are considered proficient in Confined Space Rescue are required to complete these activities, but all employees are encouraged to and should participate.

The first activity begins in August with Knot Tying. If you have a suggestion



for a specific activity, please contact the Health and Safety Team at safety@moranenvironmental.com.

What's Your Learning Style?

There are many different types of learners, but, in general, learners can be broken down into three categories: Visual (seeing and looking), Auditory (hearing and listening), and Kinesthetic (touching and doing). Typically, individuals learn best with a combination of these learning styles. Take this online quiz to see what kind of learner you are: <http://tinyurl.com/ocro6vk>.

MORAN ENVIRONMENTAL
RECOVERY LLC

Safety Brief

PHONE
(251) 284-1525

FAX
(866) 311-4762

EMAIL
safety@moranenvironmental.com

