

AIGA 2008 MEETING

Product Vehicle Safety & Accident Prevention



Asia Industrial
Gases Association



FMM MIGMA

Co-organiser:

FMM Malaysian Industrial Gases Manufacturers Group

Learning from Past Incidents

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Primary Causes of Truck Accidents

- Driver fatigue
- Failing to adjust for conditions (weather or road)
- Speeding, following too close and erratic driving
- Vehicle design - high center of gravity or wheel base spacing/tanker sloshing
- Drugs and alcohol
- Poor vehicle maintenance
- Distractions such as use of mobile phone systems
- Driving with unsecured loads
- Careless automobile drivers that do not understand that trucks require a longer response time

Often, two or more of the factors above are contributing factors to an accident.

What Do You Typically See When it Goes Wrong?

- **Lack of good management and supervision which fosters an environment where drivers feel that they can act outside of the rules.**
 1. Policy is not enforced - boundaries are no longer known.
 2. Minor incidents are not reported and dealt with in an appropriate manner that might help to improve drivers' attitudes.
 3. Drivers that had good attitudes, or that could be persuaded to go either way, perform poorly due to the working environment.
 4. **Major** accident frequency increases.
- **Regaining control and credibility is difficult to do once this has happened.**

Getting it Right

- Engage supervisors and managers in the process and have them **“Walk the Talk”**.
- 1. Ensure that proven policies and procedures are available and well communicated to all - **everyone needs to understand the rules**.
- 2. **Enforce the policies** and procedures **consistently** -make few exceptions and have a procedure in place for approval to use an exception.
- 3. Hold regular safety meetings with the team to discuss transportation safety and **take action when drivers raise issues/concerns**.
- 4. Hold regular one-on-one meetings with drivers and have **honest performance reviews**.
- 5. Managers and supervisors should never compromise themselves.
- 6. Encourage the drivers to be **professionals**.

Driver Fatigue

- Enforce a policy that limits the driving hours and total daily, and weekly working hours.
- Make it known that moonlighting will not be tolerated.
- Use vehicle monitoring systems to allow the review of drivers habits and working hours.
- Have tolerance for drivers that may on occasion not feel well rested and need to take additional time.
- Do not break the rules to satisfy the business needs. This needs to be well managed to ensure that all requirements are met.













Failing To Adjust for Conditions

■ Wet or icy road conditions

Slowdown and leave additional space between you and the vehicle in front-allow enough time and distance to react and maintain control of the vehicle.

■ Night driving

Keep the headlamps clean and use the high beams as required. Anticipate that animals will be running across the road and do not swerve to avoid them.

■ Poor roads

Reduce speed when there are potholes or when there is little or no shoulder to the road.









Speeding, Following too Close and Erratic Driving

- Leads to loss of control of the vehicle and increases the distance required to bring the vehicle under control. Trucks require a much greater distance to slow down and come to a stop.
- When following too close, there is not sufficient time to bring the vehicle to a stop when the traffic speed ahead is reduced. This often results in serious rear end collisions.
- Erratic driving - frequent and quick lane changes as well as variations in speed cause other vehicles to react and possibly lose control.







Vehicle Design

- A high center of gravity design will make a vehicle prone to rollover - a lower centre of gravity is always preferred.
- A longer wheel base design typically improves the vehicles stability on the road and makes driving easier.
- Tanker sloshing is a very common cause of vehicle rollovers. Internal baffles are often used to help control front to back sloshing. Side to side sloshing is more difficult to prevent. A fully loaded tanker handles better than a partially loaded tanker. Tanker drivers need to be experienced, and understand the additional care and control that is required to transport loads that are constantly shifting.
- Trains or double trailers have a tendency to want to move in opposite directions-it takes a very experienced driver to operate this type of equipment.







Drugs And Alcohol

- **Drugs and alcohol have NO place when it comes to driving.**
 1. Have a zero tolerance policy.
 2. Perform random drug and alcohol testing of drivers where the law allows.
 3. Heavy drinking the night before reporting to work, even with eight hours of sleep, leaves the individual functioning poorly and in no condition to be behind the wheel of a truck.
 4. Supervisors and dispatchers should be trained to recognize when a driver reports to work and shows signs of impairment.

Poor Vehicle Maintenance

- Worn brake systems and tires are common contributors to vehicle accidents.
- Windshield wipers and lights are important for safe vehicle operation.
- Mirrors should be in good condition, and positioned so that drivers have good visibility down both sides of the vehicle including the adjacent lanes. Concave mirrors expand the area of drivers visibility.
- Fifth wheel and kingpins should be tight, and within tolerances to avoid trailers disconnecting when on the roadways.
- Axle maintenance is critical to avoid tire fires.





Driver Distractions

- Mobile phones should not be used when a vehicle is in motion. Studies have now shown this to be a leading cause of vehicle accidents. A mobile phone policy should be in place and be enforced.
- Articles in a vehicle should be properly stowed so that they cannot move about and cause the driver to try and catch or pick them up.
- All controls should be located in the vehicle cabin where the driver can access them easily while remaining focused on the road ahead.
- Drivers should stop the vehicle at meal times and not attempt to eat while the vehicle is in motion.



Unsecured Loads

- Vehicles should be designed for the load to be transported.
- Cylinders and other articles that are to be transported must be secured to the vehicle, such that they cannot shift even with severe road vibration.
- Drivers must take responsibility for the loads they transport. Load checks should be performed before the trip starts, shortly after the trip has begun, and frequently throughout the trip. The frequency depends upon the type of load transported. Some loads are more prone to shifting.







Careless Automobile Drivers

- Many automobile drivers do not understand the additional distance and space requirements that trucks must have to maneuver safely.
- They often try and pass a truck when there is no passing lane.
- They may quickly move in front of a truck on the roadway and then brake quickly not understanding that trucks require a longer response time to slow down and / or stop.
- Our truck drivers need to be trained to drive defensively and to anticipate what other vehicles may do. The best driver is one that masters **Defensive Driving**.





All Vehicle Accidents are Preventable When:

- Management is fully engaged and has a robust and consistently enforced safety program.
- Drivers act like and are treated like professionals. They have the authority to stop the trip whenever they see that safety may be compromised.
- Vehicles are designed for the purpose and with built-in safety features.
- Vehicle maintenance is performed regularly and by qualified maintenance personnel.
- Drivers incentives should include a significant safety performance component and not just a quantity component.

Thank You