In-Plant Vehicles: Skeletons in the Closet

Hazards are ever-present in the steel plant environment, and a heightened awareness and emphasis on safety is a necessary priority for our industry. This monthly column, coordinated by members of the AIST Safety & Health Technology Committee, focuses on procedures and practices to promote a safe working environment for everyone.

Motor vehicle accidents/incidents are the leading cause of worker death while on the job. In the U.S. in 2012, there were a total of 4,383 worker deaths, with 41% of these, or 1,799 deaths, being directly related to the use of a motor vehicle (Figure 1). The National Highway Traffic Safety Administration (NHTSA) Fatality Analysis Reporting System (FARS) paints an even darker picture for vehicle-related fatalities. For 2011, there were 29,757 vehicle accidents resulting in fatalities, with the death toll reaching 32,367 including passengers and pedestrians.

As can be seen from the numbers, driving a motor vehicle — whether a few miles inside a plant or across the country — is a task that should not be taken lightly. What can be done to help ensure that employees using in-plant vehicles are safe and will not become one of the numbers?

In-Plant Vehicles

First, the term “in-plant vehicle” must be defined. These are vehicles that do not leave the confines of the facility and can be used by maintenance staff or supervisors. Many times these vehicles may not be licensed for road use or may have even been purchased from a salvage yard. This type of vehicle is typically overlooked when it

![Figure 1](image)


comes to maintenance and inspections, and many times it may not be clear who is driving the vehicle.

**Why Be Concerned About These Vehicles and Their Drivers?**

Although these vehicles may never leave the facility, the chances of an accident or incident occurring that causes injury or fatality may be high. As noted earlier, vehicle accidents historically have been and continue to be the number one cause of workplace fatalities and injuries. Keep in mind that vehicle accidents may not involve damage to only the vehicles; injuries as a result of accidents can occur that can be more costly than the vehicle damage itself. Even low-speed collisions can cause serious injuries if the safety devices in the vehicle are not functioning properly.

Unlike high-value mobile equipment, these in-plant vehicles are seldom subject to the same rigorous inspection and maintenance programs and many times are in poor condition. This lack of proper inspection and maintenance can lead to many problems: brakes may not function correctly, safety equipment such as seat belts may be damaged or removed, windshields may be cracked and windshield wipers may not be functional. All of these problems can lead to an increased likelihood of accidents and injuries.

Why focus attention on the in-plant vehicles? They never leave the facility, and only drive a few thousand miles per year at most. Not only is there the issue of potential damage to the vehicle being driven in the event of an accident, there is also the potential for injuries to employees, which could be covered under workers’ compensation programs, possibly causing an increase in premiums. But what about contractors or visitors — where do they fit into the equation? Imagine that an in-plant vehicle just backed into a dump truck owned and operated by a contractor hired to remove the slag from a facility. The dump truck and the in-plant vehicle each sustained minimal damage, but who will pay for the damage? Typically, the auto coverage on the in-plant vehicle will go into effect if the loss is higher than the deductible, but small accidents such as this rarely exceed the deductible. Also, this incident may damage the relationship with the contractor.

Now take the same scenario, but in this case, the driver of the dump truck was injured. Depending on the negligence rules in the state in which the accident occurred, whether contributory (if the claimant has any negligence, they are barred from recovery), comparative (percentage of negligence by the plaintiff determines amount that they can recover), or modified comparative negligence (in some states, if the plaintiff is 50% or more negligent, they are barred from recovery), the costs can quickly erode the available coverage. One of the first things the plaintiff’s counsel will request is a certified copy of the declarations page of all policies prior to making any demand, which allows them to see the coverage available, and they will then make their demand. Depending on the severity of any injuries, the plaintiff’s counsel may make a demand greater than the available coverage; and depending on the jury (plaintiff- or defense-oriented), judgments could exceed the available coverage.

**What Can Be Done to Help Reduce the Likelihood of Accidents and Injuries From the Use of In-Plant Vehicles?**

One of the first things that should be done is to conduct a thorough review of the fleet safety program and ensure that there are policies and procedures in place that cover the acceptable use of in-plant vehicles. After ensuring that the in-plant vehicles and operators are covered in the fleet safety program, the next logical step is to take a physical inventory of the vehicles that are used inside the plant only. This will give a total number of vehicles as well as provide an understanding of where the vehicles are used and what they are used for. One may be surprised to find that there are quite a few vehicles in his/her plant that he/she may know nothing about.

After the inventory, each vehicle should be thoroughly inspected. Any vehicle that is found to have defects should be placed out of service and not driven until repairs are made. This would also be a good time to decide if the vehicle is worth being repaired. A vehicle found to need excessive or expensive repairs, such as cracked frame members or engine problems, may be better suited for the scrap yard than being repaired.

Once an inventory of the vehicles and all of the repairs are completed, focus can now be shifted to the qualification and training of employees who are authorized to drive the in-plant vehicles. Being authorized to drive is the key — the objective here is to make sure that only individuals who have been properly vetted are driving the vehicles.

**What Is “Qualification?”**

One must make sure that the employees who are authorized to drive the vehicles have the proper knowledge, training and ability to drive the in-plant vehicles. These vehicles should be looked at like any other mobile equipment in a facility. A coil bander would not be allowed to operate an overhead crane without being properly trained, and in most instances certified, so the same set of principles should be applied to in-plant vehicles.

To begin the qualification and authorization process, make sure that the employee who will be using the in-plant vehicle is properly licensed. Although the vehicle
is intended to be used in the facility only, there may be instances where the vehicle must be driven on or cross a public road that runs through or adjacent to the facility. Along with making sure that a potential driver is licensed, a review of his/her motor vehicle record (MVR) for the past three to five years should be conducted. Reviewing the MVR will provide a glimpse of how the employee operates a vehicle. Things to look for include violations such as speeding, driving under the influence, etc. Criteria must also be established to gauge if a driver is acceptable based on the review of his/her MVR. A good starting point is that the prospective driver should have no more than two minor moving violations in the past three years or no more than one at-fault accident in the past three years, including violations in his/her own private vehicle or a vehicle driven for work. Any major violations should be examined, such as driving under the influence of drugs or alcohol, hit and run, vehicular homicide, or use of a vehicle in commission of a felony.

**Driver Training**

After qualifying a driver, he/she must be trained. What type of training is needed depends on the type of vehicle and any special equipment that is on the vehicle. Driver training should cover all of the variables that a driver may face, and in the case of in-plant vehicles, the training should include where the vehicles are to be operated. At a minimum, the driver should receive defensive driver training and be instructed on the fleet safety program. The driver should also be instructed to conduct daily inspections of the vehicles and report any defects to the person responsible for maintaining the fleet of vehicles within the facility. If any defect is found that affects the safe operation of the vehicle, then the vehicle should not be driven until the defects are corrected. Training of the driver should not be a “one-and-done” type of affair. Ongoing training and periodic check-rides should be completed to ensure that drivers are operating the vehicles as safely as possible.

**Conclusion**

Just like all of the other equipment in steelmaking and manufacturing facilities, policies and procedures must be put in place for in-plant vehicles. Use of in-plant vehicles can carry significant exposure to accidents and injuries, and can pose a significant threat to injury and illness rates. Policies and procedures need to specify who can drive, what the vehicles can be used for, where can they be driven, and how they are to be inspected and maintained. It is also important to train the employees that are authorized to drive the in-plant vehicles. If all of the pieces fit in this puzzle, a significant impact can be made in helping to reduce the likelihood and severity of injuries that can occur due to the use or misuse of in-plant vehicles.

**References**