

STANDARD OPERATING PROCEDURES

Vehicles, Mobile Equipment, and Transporation Safety

MODULE 5

Last Modified:

Page:

JAN 2013

1 of 10

Vehicles, Mobile Equipment, and Transportation Safety

I PURPOSE

To establish minimum standards for the operation of vehicles and equipment so as to ensure they are driven and operated in such a manner as to prevent accidents and incidents and provide for the safe transport of employees, visitors, and contractors.

2 SCOPE

This procedure applies to all functional areas, operations, offices, including employees, vendors, visitors and contractors within the scope of the Integrated Management System (IMS).

3 DEFINITIONS AND ACRONYMS

Definitions

Approved is certified to meet the minimum standards established by the HSLP Department. All PPE used in the operations will meet at least the ANSI standards, or other international or local standards which comply with or exceed ANSI.

Equipment is used in earth works, material handling, and auxiliary services such as flatbeds, buses, forklifts, and lube trucks

General Rules are rules which apply to all employees and contractors regardless of where they work or what they do.

Job Specific is any requirement directly associated with a specific job, task, or occupation.

Light Vehicles are used for the transportation of employees and supervision such as pick ups, vans, and sport utility vehicles.

Mass Transportation Vehicle is a vehicle, excluding pickups and cars, designed for mass personnel transport (e.g. vans, buses, and trains).

Oversized Load is anything transported that is more than 12 ft wide, a height of at least 20 ft, or a weight of 60 tons or more.

Positive contact is when radio or other types of verbal communication are used by more than one person to communicate a need and all persons understand the communication and its intent. A reply back as to having received, understood, agree, or disagree with the communication is required for the completion of the positive contact.

Pre-Use Inspection is an inspection of vehicles and equipment that shall be completed prior to operation.

(Cont.) www.coresafety.org

Last Modified:

Page:

JAN 2013

2 of 10

Priority is the preference enjoyed versus other vehicles or equipment with respect to the use of the road, size of equipment, load, and other hazards.

Right-of-way is the privilege given to the driver of a vehicle or equipment to continue driving with priority over others.

Site refers to a mine in operation, reclamation or exploration in the COMPANY.

Transportation Coordinator is any COMPANY personnel assigned to coordinate mass personnel transportation.

Transportation Provider is any personnel or group, contracted or otherwise, providing mass transportation for the COMPANY.

Work Area Inspection is an inspection of the area an employee may work in and/or has responsibility for (e.g. dump, pit, grind, crusher, etc.) to identify possible health and safety hazards/risks which then must be reported and corrected.

Acronyms

ASTM HSLP Management Representative
FOPS HSLP Management Representative
HMR HSLP Management Representative
PPE Personal Protective Equipment
ROPS Roll Over Protection Structure
SAE Society of Automobile Engineers

4 ROLES AND RESPONSIBILITIES

Document Owner

HMR

Responsible Roles and Position-Holders

Transportation Coordinators serve as liaisons between the COMPANY and transportation providers when/where applicable. They are responsible for developing and communicating schedule and routing information with the cooperation of both the COMPANY and the transportation providers which shall include locations and times for pick-up and drop-off of personnel and safe transportation routes.

Transportation Providers are businesses or COMPANY personnel providing a mass transportation service for the COMPANY. They are responsible for complying with all roles as applicable in this document, cooperating with the Transportation Coordinator, following routes and schedules as provided by the Transportation Coordinator, and shall provide good, friendly, courteous, comfortable, and safe service for passengers. They shall ensure drivers/ operators have proper training and certifications/licenses for vehicle/equipment and for other requirements such as first aid and response to emergency situations. They shall maintain a



Last Modified:

Page:

JAN 2013

3 of 10

competent inspection and maintenance program as required/recommended by manufacturers and regulatory agencies which shall include a preventive program.

Contractors/Vendors are businesses performing a service for the COMPANY. They are responsible for ensuring their employees working on COMPANY sites have received training as specified in this procedure and that their employees understand and comply with the requirements as outlined in this procedure.

Employees and Contracted Employees are all employees in any position whether COMPANY or contracted employees working on any COMPANY site. They are responsible for complying with the requirements for operation of any vehicle or equipment as outlined in this procedure and to have received proper training ensuring correct qualifications, and certification/authorization before operating any vehicles or equipment.

Visitors are anyone not employed by the COMPANY in any capacity but are traveling or touring on a COMPANY site. They are responsible for complying with the requirements for operation of any vehicle or equipment as outlined in this procedure and/or as required by employees.

HSLP is any COMPANY employee working under and including the Regional Director of HSLP. They are responsible for monitoring and periodically auditing the COMPANY and Transportation Providers for compliance with this procedure and applicable regulatory agency requirements then providing recommendations as needed after review of results..

Lead/Development Personnel or Trainers are employees assigned by supervisors or management to conduct training of employees. They shall evaluate all drivers and operators as appropriate for vehicle or equipment and issue training documentation or certification/authorization. They shall train drivers in defensive driving and maintain the training records.

Maintenance Personnel are employees assigned to carry out the necessary corrective, preventive, or predictive maintenance on vehicles and equipment including repairs according to the pre-use inspection, PM checks, and as based on the seriousness of defects. They shall conduct and schedule the technical inspections of all vehicles and equipment.

A Supervisor/Foreman can be a COMPANY employee or a contractor/vendor working or traveling on any COMPANY site. They are responsible for enforcement of all vehicle, equipment, road, and traffic safety requirements, rules, and established guidelines as outlined in this procedure. They ensure personnel are provided with the necessary and proper training for all vehicle and equipment operation. At least annually the supervisor/foreman gives a safety talk reviewing vehicle, equipment, transportation, road, and traffic safety with employees in his/her area of responsibility. They shall investigate and report any traffic accident or incident and ensure proper corrective action is completed. They are responsible for proper maintenance on all vehicles and equipment in their areas and shall only allow the operation of vehicles and equipment which are in good condition and which have passed the technical inspection.

GF or Superintendents or Mangers can be a COMPANY employee or a contractor/ vendor working or traveling on any COMPANY site and are required to provide oversight to the procedure.

4 of 10

5 DIRECTION

All employees, vendors, contractors, and visitors traveling/working on site shall comply with and ensure personnel accountable to them comply with the following requirements of this procedure.

General Rules

General rules and requirements for vehicle, mobile equipment, and transportation safety and operation:

It is strictly prohibited to drive a vehicle or equipment if the operator is under the influence of alcohol or drugs.

Every vehicle/equipment shall have as a minimum a fire extinguisher and appropriate safety accessories for emergency use which are in good operating condition.

a Mass transportation vehicles shall have first aid kits and, if available, AEDs.

Keep left when driving on the mine sites except where otherwise posted.

Drivers and operators:

- **a** Must possess a valid Driver's license appropriate for the transportation vehicle being used with any applicable endorsements.
- **b** Shall only drive those vehicles for which they have a valid driver's license or equipment for which they have obtained the proper training and certification/authorization.
- **c** Shall carry their authorization to operate the vehicle or piece of equipment, e.g. company license or evidence of qualification, with them or readily available on site.
- **d** Have a valid COMPANY security identification card.

Headlights shall be kept on at all times, day or night, when vehicle/equipment is running. At night, when approaching and/or following a vehicle closer than 600 ft, low-beam lights shall be used.

Light vehicles require buggy whips, which extend at least 3 feet above the roof line and flashing lights on roofs when driving in active mining areas and roads. The color of roof lights shall be green.

- **a** Buggy whips are dependent on the size of the vehicle to ensure adequate visibility above the highest road berm on the site traveled.
- **b** Vehicles with clean working clearance lights and with profile heights above nine (9) feet can be adequately seen above the haul road berms and do not need buggy whips.

The use of safety belts properly worn, which include the shoulder strap over the shoulder and not under the arm, is mandatory for all persons driving, operating, or being transported by vehicles or equipment when safety belts are provided.

a Drivers of mass transportation shall have three (3) point safety belts at a minimum which shall be worn per manufacturer's recommendations.

5 of 10

- **b** Drivers shall not move vehicle/equipment until all passengers are seated and they are correctly utilizing the appropriate safety belt per the manufacturer's recommendations.
- **c** The number of passengers shall not exceed the number of seat and/or seat belts provided by the manufacturer.

Transporting authorized personnel is allowed only inside the vehicle/equipment cab or in areas specifically designed for the purpose of transporting personnel.

Use, wear, and maintain PPE as required for equipment and conditions.

Passengers of vehicles, equipment, and mass transportation shall not be transported:

- **a** In a vehicle if their weight plus that of any tools, equipment, and load exceeds the gross weight allowed for that vehicle.
- **b** If equipment, tools, or loads block or impede the exits or if they are loose and not tied or secured to prevent a hazard to passengers.

Vehicles and equipment shall not be used for driving practices or other endeavors which exceed or are not intended by the manufacturer by recommendation or design.

Abide by ALL traffic signs including speed limit signs. Report to supervisors when signs need maintenance.

Every change of direction shall be properly signaled by using the appropriate turn signal lights and shall be used well in advance of direction change.

A distance of 200 feet shall be maintained when following vehicles/equipment in surface operations.

A distance of 100 feet shall be maintained when following vehicles/equipment in underground operations.

Drivers/operators shall avoid, when possible, being in the blind spots of other vehicles/ equipment without first making positive contact with the operator. When possible, remain in an area where you can be seen by the operator and can establish visual contact.

All operators shall be aware of pedestrians or personnel working on the ground when operating vehicles/equipment.

All doors shall be closed and secured while the vehicle/equipment is moving.

The drivers/operators are responsible for the care and maintenance of assigned vehicle/equipment.

- **a** Any issues that are identified with the vehicle/equipment and its operation shall be reported immediately to supervisors.
- **b** Windshields, mirrors, lights, and license plates shall be cleaned regularly.

Drivers, operators, and passengers are responsible for maintaining good housekeeping inside the vehicles/equipment they are driving, operating, or riding in.

a Each individual is responsible for removing all items and trash.

6 of 10

b No vandalism or destruction of COMPANY or private property (cutting seats, writing on walls, etc.).

Equipment such as front-end loaders, backhoes or other similar equipment must place the bucket in the travel position as recommended by the manufacturer when tramming from one location to another.

Berms shall be constructed at a height which is equivalent to mid-axle height of the largest vehicle/equipment operating in that area or road.

Should it be necessary to tow a vehicle or equipment, a tow bar or other approved towing devices, adequate for the type and size of the vehicle or equipment being towed, shall be used.

- **a** Vehicles and equipment shall be towed using appropriate/designated towing points/locations (e.g. hitches, pins, hook, etc.).
- **b** Observation programs/tools (e.g. safe check, JSA, safe work permit, etc.) shall be used for special towing situations.

Never enter areas where you do not have proper authorization/permission i.e. coned, bermed, or barricaded.

Cell Phones shall not be used while operating equipment or vehicles unless a "hands-free" system is available and used.

Reduce speed to controllable limits during adverse weather conditions, when there is poor visibility, or with bad/changing road conditions.

Passengers shall get on and off equipment, vehicles, and mass transportation at authorized and designated areas ONLY and shall maintain and respect the order of arrival.

Smoking is not allowed in vehicles, equipment, or mass transportation where it can have an effect on other passengers.

Storage and/or transportation of pressurized gas cylinders or aerosol cans within the operator/passenger compartment of vehicles or mobile equipment is prohibited.

Drive defensively.

Traffic patterns shall be followed at all times unless otherwise instructed by personnel directing traffic when/where required.

All accidents and incidents shall be immediately reported as required in PROC Accident and Incident Investigation.

Vehicle, Equipment, and Mass Transportation Requirements

Surface mining equipment must be equipped with R.O.P.S. (roll over protection structures) meeting the appropriate Society of Automobile Engineers (SAE) publications.

Forklift trucks and underground equipment shall be equipped with F.O.P.S. (falling object protection structures) if used in areas where falling objects could create a hazard to the operator.

7 of 10

Backup alarms shall be installed on vehicles that have an obstructed view to the rear. The alarm must be audible above surrounding noise levels.

Mass Transportation Vehicles shall be designed, manufactured and maintained according to applicable regulatory requirements and safety standards.

a Modified vehicles will not be accepted for Mass Transportation of personnel unless it is factory modified or formally approved by the original manufacturer.

Vehicle/equipment doors shall be fitted with handles operable from the inside and outside.

Side doors for Mass Transportation shall be located on the right hand side of the vehicle and shall not be obstructed.

Mass Transportation Vehicles that are required to have functioning emergency exits shall have the exits maintained in compliance with applicable regulatory safety standards.

All types of vehicles/equipment shall provide safe ways for egress (e.g. handrails, slip resistant floors, stairs, etc.).

Windshields shall be non-shattering safety glass (e.g. laminated, tempered) with a stamp indicating the type of glass for all vehicles intended for off mine property and on public roadways.

- **a** Other equipment operating on mine property shall have safety glass (e.g. laminated, tempered) but a stamp is not required.
- Windows with spider cracked glass or any cracks that impede the driver's vision require the equipment immediately be tagged and locked out until the window can be replaced.

All types of vehicles/equipment shall have an effective means for communication (e.g. two-way radio, cell phone, etc.) for reporting of emergencies or problems in an effective manner.

a All vehicles/equipment operated on mine property shall have a two-way radio for communication at a minimum.

Pre-Use, Pre/Post-Operational, or Work Area Inspection

Pre-use inspections shall be completed prior to operation of any vehicle/equipment.

a Light vehicle drivers are not obligated to document their pre-use inspection, unless safety defects are found.

Only vehicles/equipment in good working condition shall be operated. No vehicle/equipment shall be used with any safety defects.

If safety defects are found upon inspection, vehicles/equipment shall be tagged out, the inspection documented on a pre-op slip or an inspection sheet, and the supervisor shall be notified.

The supervisor shall be notified of any equipment/vehicle damaged or in need of repair before or during a shift and/or while in operation.

8 of 10

A park brake test must be completed before any vehicle/equipment is operated.

a Light vehicles complete this by parking on a grade, setting the brake, and placing the vehicle in neutral. If it does not roll, the park brake is in operating order. Never test the park brake by putting the vehicle in gear and trying to drive through the park brake.

Inspection sheets shall be turned in to supervisors at the end of shift or sooner if safety defects are noted.

Post operational inspections shall be completed as needed, as regulations require, or per manufacturer recommendations.

Work area inspection shall be completed as required per SOP Inspections.

Parking

When parked all vehicles/equipment shall have the gear selector placed in the park position or the appropriate gear as per the manufacturer's recommendations, the parking brake engaged if equipped with one, and chocked or ribbed.

When parking equipment with implements such as blades, rippers, forks, etc., the operator shall lower the implements to the ground.

When parking on a grade, as evidenced by movement of the vehicle when it is put in neutral, wheels or tracks shall be turned into a berm or bank, placed into a parking ditch or "ribbing", or chocked. A single chock on the down hill side is sufficient when grade is evident.

Never leave/park a vehicle/equipment with the engine running unless precautions have been taken to assure it will not move.

If for any reason drivers/operators must park in any area other than designated parking areas, some type of visual warning shall be used (e.g. turn parking lights on, leave strobe light running, place cones around vehicle, etc.) and positive communication to the area supervisor informing of vehicle location.

a When possible vehicle/equipment should be parked away from active mining equipment and haul roads or in areas with less activity from traffic.

Never park in a location near the high wall where the vehicle/equipment may hinder escape from material falling from the high wall.

Parking areas should have, when/where possible, ditches in which to place the front or back wheels, and shall be of a depth adequate for the vehicle/equipment size.

Operators shall not block fire-fighting or emergency response equipment or the accesses to such equipment when parking.

Do not park or unload passengers at a curve.

Parking on the road is not allowed, except for emergencies.

9 of 10

Right-of-Way Priorities

The road will be considered to be FREE if there are no vehicles on your left, right or straight ahead, in which case you may cross freely. Otherwise, you must abide by the Right-of-Way Priorities. Follow all Right-of-Way priorities in order as listed below.

- **a** Emergency equipment always retains right-of-way (i.e. ambulance, fire truck).
- **b** Vehicle or equipment hauling explosives.
- **c** Haulage equipment has the right-of-way over vehicles and other equipment.
 - Loaded Haul Truck
 - Unloaded Haul Truck
- **d** Other heavy equipment has the right-of- way over light vehicles.
- **e** Vehicles/equipment driving right hand traffic will yield to the right.
 - Unless otherwise posted.
- **f** Vehicles/equipment driving left hand traffic will yield to the left.
 - Unless otherwise posted.
- **g** Vehicles/equipment going up hill have priority over those going down hill.
- **h** Vehicles/equipment shall yield to all oncoming traffic when turning.
- i Vehicles/equipment entering a roadway shall yield to those already on roadway.

Horn Signals

All self propelled mobile equipment operators shall sound the horn once before starting equipment (not required for light vehicles). All vehicle/equipment operators shall sound the horn twice before driving forward; and three times, before reversing. A two seconds delay is required before starting or driving.

Heavy mine equipment will follow step 5.6.1 for all initial start up/movement and after all maintenance work. Sounding the horn for forward and backward movement during the production load/haul/dump cycles is not required.

Passing

Passing of slower moving mining equipment is allowed on straight sections when safe to do so and only after positive verbal radio contact has been made and returned by the operator of the equipment being passed.

The responsibility of determining when it is safe to pass belongs to the person doing the passing.

Pass only when it is safe to do so, when in doubt do not pass.

Never attempt to pass in the vicinity of an intersection or blind spot.



Last Modified:

Page:

JAN 2013

10 of 10

Oversized Loads and High Profile Equipment

Safe approachable distances to overhead power lines will be maintained as out lined in SOP Overhead Power Lines.

Safe clearance shall be maintained between the top of the cargo, equipment, structure, and high-voltage lines.

Corrective Action System for Driving Related Offenses

All drivers on the site must drive in conformance with traffic safety rules, regulations and procedures.

Drivers being in violation of these rules shall receive disciplinary action in accordance with this.

Journey Planning

Persons using COMPANY vehicles for long trips in remote areas i.e. trips to remote areas with minimal emergency services or telephone reception shall first develop and communicate to their immediate supervisor a travel plan. The plan will ensure:

- **a** Communication exists between the driver and a designated COMPANY communication center or person.
- **b** Appropriate emergency equipment, supplies, and clothing are available in the vehicle.
- **c** Prior to the trip, the vehicle was found to be in good working order per a maintenance inspection and PM.
- **d** Travel will be during daylight hours only.
- e Check-in procedures have been established.