

# **SNOW PLOW SAFETY**

This quick reference guide highlights snow removal and snow plow safety practices. The goal of the bulletin is to prevent personal injury to operators and to protect the general public from injury or property damage.

To ensure winter services can be performed safely, crews should be adequately trained, equipment regularly serviced, and your snow routes properly maintained.

The following checklists will help to ensure the safety of motorists as well as those responsible for performing winter operations in your organization.



# PERSONNEL PREPARATION PRE-WINTER OPERATION SAFETY TRAINING

Before winter comes, make sure your crew members have received training in the use of equipment, safe material handling, and snow routes. Each driver should travel their planned snow route in good weather, to become familiar with the hazards and conditions on their route. Snow routes should be reviewed in advance of winter operations so that hazards are identified and eliminated or delineated before plowing. This review should be ongoing and incorporated into a routine maintenance program.

# **CHECKLIST: CREW SAFETY DURING WINTER OPERATIONS**

- Employees are physically prepared to perform the tasks:
  - ✓ Adequately rested
  - ✓ In reasonably good health and capable of performing the tasks associated with winter operations.
  - ✓ Not impaired by medication or alcohol.
- Personal protective equipment is available and accessible to employees:
  - Multi-layered warm clothing
  - ✓ Hardhat with liner
  - ✓ Safety vest
  - ✓ Adequate footwear for working in a cold, wet environment
  - Insulated work gloves or work gloves with liners
- Employees have access to emergency gear or a survival kit::
  - ✓ Communications (radio or cell phone)
  - Operators' personal belongings, such as a lunchbox, thermos for fluids, and any necessary prescribed medications
  - ✓ Flashlight with extra batteries
  - ✓ First aid kit
  - ✓ Ice scraper/snowbrush
  - ✓ Basic tool kit with jumper cables
  - ✓ Road flares or reflectors
  - ✓ Red flag for traffic control
  - ✓ Shovel and traction materials (sand)
  - Fully charged fire extinguisher

#### EQUIPMENT PREPARATION PRE-WINTER OPERATION EQUIPMENT

Just as you want your employees to be adequately trained and prepared before the start of the winter season, you also want all equipment used to perform winter operations to be readied and maintained to ensure safe operation and optimum performance. Potential equipment malfunction in the middle of a storm, especially at night, could put both the operator and the motoring public at risk.

# CHECKLIST: CREW SAFETY DURING WINTER OPERATIONS

- ✓ Preventive maintenance conducted.
- ✓ Seasonal inspection performed.
- ✓ Deficiencies are identified and repaired.
- Plows and spreaders are attached to trucks and tested to ensure functionality.
- Plows are blocked up to facilitate attachment during winter.
- ✓ Engine block heaters are tested and cords properly stored.

# CHECKLIST: PRE-TRIP DAILY WINTER OPERATION

- ✓ Fuel.
- ✓ Fluid levels.
- ✓ CDL safety check.
- ✓ Tires checked for pressure, tread wear, and cuts.
- ✓ Heater/Defroster.
- ✓ Brakes.
- ✓ Windshield wipers.
- ✓ Windows and mirrors cleaned.
- ✓ Lights working.
- ✓ Backup alarm.
- ✓ Plow flags and lights in place.
- ✓ Radio communications.

# CHECKLIST: VEHICLE OPERATION SAFETY

- ✓ Use safety belt.
- ✓ Drive defensively.
- ✓ Obey all traffic laws.
- ✓ Backup safely.
- ✓ Allow sufficient stopping distance.
- Never raise the dump bed higher than the truck cab when moving.
- ✓ Block the plow before changing blades.
- ✓ Disconnect the spreader hydraulics before unclogging.
- ✓ Monitor the fatigue level of yourself and other crew members.

Safety in and around the stockpile/assembly area is important during winter operations. With activity expected to be round-the-clock during storms, be especially wary of locations around that facility that may cause slips, trips, and falls. Good housekeeping habits will help eliminate many of these hazards before snow covers them.

Also, inspect lighting indoors and out, and repair or replace any broken fixtures and burned-out bulbs as soon as you can.

#### **MATERIAL SAFETY**

Chemicals used during winter operations must be stockpiled and properly stored. Improperly stored winter chemicals can be harmful to the environment and may become unsuitable for use.

Winter chemicals should be identified with signs, and Safety Data Sheets (SDS) properly posted at the stockpile site. All employees should also be aware of emergency procedures and first aid as identified on the SDS forms.



# CHECKLIST: TYPICAL ROADSIDE HAZARDS

- ✓ Canopied vegetation over the roadway.
- ✓ Low-hanging limbs.
- ✓ Utility lines less than 18 feet above the road surface.
- ✓ Ponded water after a rain event.
- ✓ Blocked/inadequate drainage systems.
- ✓ High shoulders that can keep water from sheet flowing from the roadway.
- ✓ Improperly designed or maintained driveways that channel water onto the roadway.
- ✓ Severe shoulder drop-offs.
- ✓ Drainage headwalls.

# **FACILITY SAFETY**

Any identified hazards scheduled for elimination. Eliminate hazards or delineate with appropriate marker.

Ponded water after a rain event.

Low-hanging branches.

Canopied vegetation over a roadway.

Improperly designed or maintained driveway that channels water onto the roadway.











# CHECKLIST: DRY RUN

Before the start of the winter season, employees should familiarize themselves with their routes and conduct a dry run of their assigned areas. Things to observe during a dry run include the following:

- ✓ Limits of the snow routes.
- ✓ Delineated hazards.
- ✓ Drainage facilities.
- ✓ Posted bridges.
- ✓ Railroad crossings.
- ✓ Safe turnaround locations.

# AFTER THE STORM

Conduct post-storm activities as soon as possible so you are ready for the next snowfall:

- ✓ Material and Equipment
- ✓ Return unused materials to the stockpile.
- ✓ Wash trucks and clean equipment.
- ✓ Check all blades.
- ✓ Check skid shoes on wings for excessive wear.
- ✓ Look over all equipment and check for cracks in welds or any missing parts.
- ✓ Point out any problems to your shop mechanic.
- ✓ Do a final walk around the truck; checking tires, lights, and wipers.

# SEWER DRAINS

Clear drains so that melting snow and ice can move quickly off the road.

# **SNOW STORAGE**

Sometimes local agencies don't have room on or near the roadway to store the snow that has been plowed. This is fairly common in urban areas. To move the snow and completely clear traffic lanes and parking spaces, local agencies load the snow into trucks and haul it away to remote storage areas. Storage areas may be on or near a lake or in remote open areas. They should be in locations that can handle the snow-melt runoff without overburdening existing drainage features and without violating Environmental Protection Agency requirements.

Remember: Think Safe! Act Safe! Be Safe!