# Trade Waste Safety Manual





To All Trade Waste Companies:

The mission of the City of New York Business Integrity Commission (BIC) has expanded since its creation 22 years ago. While our primary mission continues to be to remove and keep out any form of corruption from the industries we regulate, our focus has expanded to include safety in the trade waste industry.

It is my pleasure to release the "Trade Waste Safety Manual," a guide that every private carting company in the city, both large and small, can use as a starting point to develop its own robust safety program. To provide you with some context for the creation of the manual, BIC is an integral member of the City's Commercial Waste Zone Advisory Board and the Mayor's Vision Zero Task Force. In September 2016, the New York City Department of Sanitation (DSNY) and BIC brought together a diverse group of stakeholders to begin the conversation about developing a commercial waste zone collection plan. During that meeting, one thing everyone agreed on was that making the trade waste industry safer for all New Yorkers was an effort that could and should begin immediately. To that end, BIC and DSNY formed the Commercial Waste Zone Collection Safety Working Group (Working Group), and invited everyone from that initial stakeholder meeting to participate. In addition to members of City government, the group includes members of the trade waste industry, union leaders, and environmental and traffic safety advocates. I would like to thank all the members of the Working Group for their assistance and expertise during the development of the manual.

Safety is everyone's issue. We appreciate all of your efforts to make the trade waste industry safer. This manual is only the first step. With your help, BIC will continue to develop training materials and increase oversight. Together, we can help the City achieve its Vision Zero goal of ending traffic-related deaths and injuries in New York City.

Davil D. Browell

Daniel D. Brownell Commissioner and Chair



#### **DEVELOPING YOUR SAFETY TRAINING PROGRAM**

Who, What, Where, and How

Welcome to the Trade Waste Safety Manual! Think of this manual as an outline of important safety topics that you can use as a starting point to develop your own safety program at your company. It covers important laws and rules, as well as industry best practices. However, the manual's purpose is not to provide legal advice or to be a comprehensive guide to all the laws and rules that are applicable to trade waste companies operating in NYC. You should develop your own safety policies and programming based on your company's operations.

Q: Who do I provide safety training to?

A: All of your workers – supervisors, drivers, mechanics, and helpers alike. Drivers and helpers work as a team and, if qualified, may on occasion need to step into the other's role on short notice. Prepare your workers to operate safely in both roles.

Q: What topics do I cover in a safety training program?

A: Think about your operations step by step – from the moment your workers arrive for their shifts until they go home. The Safety Manual is great place to start. It covers essential safety topics like personal protective equipment, proper lifting, collision avoidance, and safe hopper operation.

Q: Where is the best setting to conduct safety trainings?

A: Provide a combination of "classroom" and hands-on training. For example, you may want to talk through proper lifting procedures with a hand-out, but then ask your workers to demonstrate what they learned. Q: When should my company provide safety training to its workers?

A: Frequently! Create a culture of safety. Make safety part of "how we do things here." Have monthly or weekly safety meetings with your team. Additionally, there are many other times you should train your staff. For example:

- When your company hires a new worker.
- When a worker takes on a new role or responsibility.
- When a worker returns from a leave of absence.
- When your company buys new equipment, controls, or other technology.
- After a worker is involved in a "near miss" collision.
- After a worker is involved in a collision or other serious safety infraction.

Q: How do I create an effective training program?

A: This manual is a great place to start. Here are some things to consider when building an effective safety training program:

<u>Commit to Safety</u>

Owners' and supervisors' behavior should reflect that safety is a priority and an integral part of how the company operates.

- <u>Reward Safe Behavior</u> Acknowledge your workers knowledge and skill by giving praise to workers who have a clean safety record.
- <u>Keep Communication Respectful</u> Supervisors should coach workers how to improve by providing constructive criticism, not put-downs. Clear guidance and examples are helpful ways to do this.
- Make training engaging

Use visuals and have hands-on components to the trainings. Make your training sessions fun – after you go over a section, take a group quiz or have a discussion where your employees tell stories of their experiences. If you have cameras on your trucks, use footage to learn from real-life situations and start discussions.





# Safe Start to the Day

#### WORKER READINESS

**Rest:** Because most commercial refuse and recycling collection happens late at night to early morning, during the body's natural sleep period, drivers have an increased risk of being drowsy. Drowsy driving can slow reaction time and impair judgment not unlike using drugs or alcohol.

- Help your drivers plan to get seven to eight hours of sleep before driving their shift.
- Host a free or low-cost sleep apnea screening.
- For more information on drowsy driving visit: www.cdc.gov/sleep/about\_sleep

*Important note:* If your drivers operate trucks with a gross weight of 10,001 or more pounds, Federal and New York State regulations limit when and how long your drivers may operate those trucks. Know the rules. Visit the U.S. Dept. of Transportation's Federal Motor Carrier Safety Administration's (FMCSA) website, www.fmcsa.dot.gov, and the New York State Dept. of Transportation's (NYS DOT) website at www. dot.ny.gov.

**Medication:** Drivers taking medication must check with a doctor to ensure the medication will not impair their ability to operate heavy machinery.<sup>1</sup> If the medication has side effects, like drowsiness, it is not safe to operate the truck as either a driver or a helper.

• Both drivers and helpers should report all medications, both over- the-counter and prescriptions, to their supervisors.

**Drugs and Alcohol:** Illegal drugs and alcohol should be banned from the workplace. Under no circumstances should drivers operate trucks while under the influence of drugs or alochol. Most importantly, FMCSA and NYS DOT regulations prohibit commercial vehicle drivers from consuming any alcohol within four hours of the beginning of their shift.<sup>2</sup> For alcohol and substance abuse prevention, treatment, and recovery resources visit: www.oasas.ny.gov.

#### HAZARDS IN THE TRADE WASTE INDUSTRY

Train your staff to know the hazards they may face while working in the trade waste industry and how to reduce the risk of injury.

Identify these potential hazards for workers:

- Lifting heavy or sharp objects.
- Exposure to blood borne pathogens, sewage, and hazardous chemicals.
- Extreme temperatures.
- Working in low visibility conditions near heavy traffic.
- Working with heavy equipment and hydraulics.

Discuss ways to prevent workplace accidents and injuries, and stress the importance of the use of proper equipment.

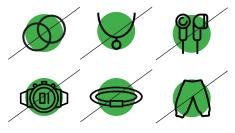
#### PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment (PPE) is essential safety equipment. PPE includes apparel such as reflective vests and other gear that is worn to reduce exposure to workplace hazards, such as low visibility at night.

PPE for drivers and helpers:

- ANSI Class II reflective outerwear such as a reflective vest, shirt, or other outerwear.
- Pants or shorts secured with a belt.
- Puncture-liquid-resistant gloves such as nitrile coated cloth or leather palm gloves.
- Steel toe or composite boots that cover the ankle rising to at least 6 inches.
- Clear plastic goggles or a face shield.

Do not accessorize



Rings, necklaces, headphones, watches, bracelets, and even loose clothing can increase the risk of injury and should not be worn on the collection route.

Make a good impression



Uniforms and PPE should be clean, shirts should be tucked in, and boots fully laced and tied. Your employees will not only look good, but will reduce the risk of injury. Consider providing the option for your employees to participate in a uniform washing service. *Important Note:* The Occupational Safety and Health Administration (OSHA) requires employers to assess workplace hazards and to provide PPE at no cost to employees. Employers are also required to train employees on the use and care of PPE.<sup>3</sup> Drivers and helpers should not be permitted to begin their collection route unless they are wearing the appropriate PPE.

#### **DVIR'S AND PRE-TRIP INSPECTIONS**

At the beginning of every shift, the vehicle's driver is required to review the previous day's Driver Vehicle Inspection Report (DVIR) and then perform a pre-trip inspection.

What's a DVIR? Also known as a post-trip inspection, the DVIR is the record of the inspection of a vehicle at the end of a shift. The DVIR identifies any defects or deficiencies in any of the truck's parts or accessories. See page 32 for more information on DVIR.

If the DVIR does not list any defects	If DVIR lists defects
The driver must sign the DVIR certifying that he has reviewed it.	The driver should make sure the truck was re- paired and that the DVIR was signed by a me- chanic certifying that the repair was made or was not necessary.

After signing the previous day's DVIR, the driver can now begin the pre-trip inspection. This is required before every trip, even if the same driver completed the DVIR for the same vehicle at the end of the previous shift.

FMCSA and NYS DOT regulations require that drivers of a commercial motor vehicle with a gross weight of 10,001 pounds or more conduct a

pre-trip inspection to make sure the following parts and accessories are in good working order before the vehicle is put into service:<sup>4</sup>

- Service brakes, including trailer brake connections.
- Parking/hand brake.
- Steering mechanism.
- Lighting devices and reflectors.
- Tires.
- Horn.
- Windshield wipers.
- Rear vision mirrors.
- Coupling devices.
- Wheels and rims.
- Emergency equipment.

If the driver does not find any defects	If the driver notes defects
The truck is ready to be put into service and the driver can begin the collection route.	A mechanic must inspect the truck and complete the necessary repairs or certify the repairs are not necessary. If the vehi- cle cannot be repaired, it must be taken out of operation until the repair can be completed.

Some Tips for Truck Inspection:

- A sample DVIR is provided in the back which can also be used as a template to develop a pre-trip inspection.
- Make a binder for each truck's pre-trip inspection sheets and DVIRs and keep it in the truck.
- Help your workers develop a routine. They should conduct the pre-and post-trip inspections the same way each time.

Safety Matters



Pre-trip inspections keep your employees and New Yorkers safe. It is designed to reduce crashes, injuries, and fatalities by identifying problems before the truck gets on the road.

#### FAQ

Q: I need to complete a collection route, but the only truck available has been put out of service. If it is a small matter, can I put a downed truck back into operation before the repair has been made?

A: No, never put completion of a route above driver and public safety. After discovering any safety defect that can affect the safe operation of a truck or result in a breakdown, you must down the truck and not put it back into operation until the repair is made. This is true even if the truck is needed to complete a collection route.

If at all possible, consider having a spare truck that can be put into operation if you need to down a truck. Also, encourage your drivers to identify and report any defects immediately. Fixing a problem early on can save you money, time, and lives.

Q: What are some examples of defects that affect the safe operation of a vehicle?

A: Anything from a small problem like a broken seat belt to the truck not starting will constitute the need to down the vehicle. Encourage vigilant reporting to avoid an unexpected repair.

Q: What should supervisors do while drivers are completing the pre-trip inspections?

A: Supervisors should make sure drivers properly complete their pre-trip inspections by monitoring the reports regularly. Supervisors should also perform spot checks before the trucks leave for the night and after the trucks get on the road. If the supervisor sees a driver skipping part of the pre-trip inspection, the supervisor should have a one-on-one conversation with the driver about how important a pre-trip inspection is to everyone's safety, including the driver's.

## Safe Start to the Day

NOTES:

# Description of the collection Route

#### **NEW YORK STATE TRAFFIC LAWS**

All drivers must obey all NYS and NYC traffic laws. Here are some that should be emphasized in training sessions:

**Seat belt use:** All drivers and front seat passengers must wear their seat belts.<sup>5</sup> There are no exceptions to this law! Please note: each truck must have a seatbelt for every member of the crew.

**Cell phone use:** NYS law prohibits using a cell phone while driving.<sup>6</sup> For supervisors: consider banning cell phones from the route or requiring that they are kept in the glove box during the route. Studies show that even hands free cell phone use is distracting.<sup>7</sup>

**No rear step riding:** Helpers are not allowed to ride on the rear step of the truck on any public roadways.<sup>8</sup>

#### **BE SMART OUT THERE!**

Train your drivers and helpers to prioritize the following tips:

- Use the three point system: Use three points of contact two hands and one foot or one hand and two feet when entering and exiting the cab of the truck.
- Rock before you roll: Utilize the mirror's full range of view by moving in your seat. Check the mirrors every 3-5 seconds while driving.
- **Don't get blocked:** *Maximize your field of vision by keeping the dash clear. Check that hoodies or hats don't obstruct your vision. Do not wear headphones or Bluetooth devices; they can prevent you from hearing warning signals.*
- Public interaction: Limit interactions with the public to respectful greetings. As you know, drivers stopped behind your collection truck get frustrated and may make angry or aggressive comments. Your best bet is to de-escalate the situation by not responding. If you are in danger, call your dispatch and 911.
- See Something Say Something: As collection workers, you are in the same neighborhoods every day and know what is normal and what isn't. If you see something suspicious or discover weapons or hazardous materials, call 911 immediately.





Did You Know? New York City employees are not allowed to use cell phones, even hands free, when driving.

Helpers' Role

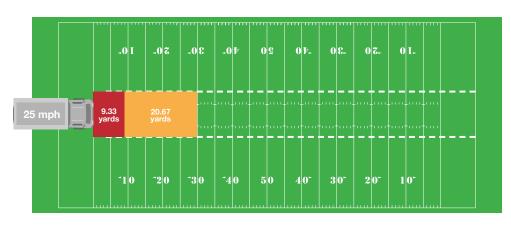
The helper is the driver's second set of eyes. While in the cab, the helper should be scanning the road and alerting the driver of any obstacles. Large trucks have been exploited by terrorists in ramming-style attacks. Use these tips to safeguard your equipment:

- Lock all doors when exiting the cab.
- Never leave keys unattended.
- Never leave a truck running when the driver is not in the driver's seat.

#### TOP TIPS TO AVOID COLLISIONS

Provide robust collision avoidance training to your employees that emphasizes urban driving. This training should cover defensive driving techniques and include sharing the road with cyclists and pedestrians. In addition, include these topics:

- **25 mph:** The speed limit on most NYC streets is 25 mph. As a larger, heavier truck, you must drive slowly to make it easier to stop and avoid collisions.
- Use the six-second rule: Keep a distance between you and the truck in front of you of SIX SECONDS when moving. Remember, the heavier the truck the longer it will take to stop.
- Consider the conditions: Leave extra room between yourself and vehicles in front of you when the truck is full and when the roads are wet or icy. Be aware of strong winds.
- Look on all sides: Be aware of your surroundings and leave room for yourself to maneuver on the roadway.

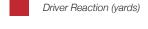


#### **Stopping Distance At 25 mph**

Enroll your employees in a NYS DMV approved collision prevention course.

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Find providers at: www.dmv.ny.gov/pirp/classroom





#### **Potential Hazards**

- Pedestrians crossing mid-block.
- Cyclists riding parallel to trucks.
- Abrupt stops or turns by other vehicles.
- Sudden lane change by another driver, or drifting into your lane.
- Being tailgated.
- Getting boxed in.

#### **Important Actions**

- Continually scan mirrors and surroundings for pedestrians, cyclists, and approaching vehicles.
- Stay alert and observe other drivers' behavior.
- Stay in the right-hand lane.
- Stay centered in lane.
- Maintain a safe speed and following distance.
- Slow down to increase distance between you and vehicles in front or to avoid being boxed in.

#### **INTERSECTIONS AND TURNS**

In NYC, a majority of fatal pedestrian crashes involving trade waste trucks have occurred in intersections. Your training program must emphasize safety at intersections. Here are some tips to include in your training:

- If you are stopped: When the signal turns green, pause! Check your mirrors and scan the intersection for pedestrians, cyclists, and other trucks. Helpers should do the same.
- If you are driving through: Cover your brake. Never accelerate through an intersection. Both the driver and helper should check corners for pedestrians, cyclist and other trucks.

In Heavy Traffic?

The most important space is in front of your truck. Give yourself at least 25 feet between you and the vehicle in front.

Rock Before You Roll



Move forward, back, and side to side to utilize your full range of vision in your mirrors.

#### On the Collection Route

- If you are turning: Prepare for each turn carefully.
  - 1. Use your turn signal to indicate to others your intention.
  - 2. Slow down early.
  - 3. Expect pedestrians in the crosswalk.
  - 4. Check for cyclists as you approach the turn. Remember that a bicyclist traveling straight has the right-of-way.
  - 5. Turns must be made slowly 5 mph is the recommended speed for all turns.

Left-hand turn tips	Right-hand turn tips
<ul> <li>Drive to center of intersection before starting the turn.</li> <li>If there are two turn lanes, use the rightmost turn lane.</li> <li>Do not try to beat oncoming traffic.</li> </ul>	• Turn wide as you complete the turn, not as you start the turn.

#### **BACKING UP**

NYS traffic law states that no one should back up unless it is safe to do so and traffic will not be blocked.<sup>9</sup> You should train your drivers to avoid backing up altogether. If they miss a collection stop, they should go around the block. Pedestrians have been struck and killed by trade waste trucks backing up.

If your drivers find themselves in a position where they must back up, train them to do the following:

- Never back up through an intersection for any reason.
- Never back up with someone on the rear step.
- If a helper is present, have the helper assist.

#### Backing up with a helper

- Review your hand signals.
  - 1. Stop = cross both arms above head.
  - 2. Turn = point one arm to indicate the direction to turn, bend other arm repeatedly towards head to indicate continued turning.
  - 3. Backward = raise arms with bent elbow so that fingers face the sky, bend both arms towards head and chest and then extend repeatedly.
- The helper should position himself at the rear of the truck and inspect the intended path.
- Wait until the helper is ready to direct your movement.
- The helper should establish and maintain eye contact with the driver, remain visible at all times, and immediately signal to the driver to stop if someone enters the truck's intended path.
- The driver should frequently check mirrors, and obey the helper's directions. Always back up slowly, and be ready to stop.

#### Backing up without a helper

- Exit your truck and conduct a visual inspection of the intended path.
- Back up slowly and avoid backing up towards the passenger side where there is increased obstructed vision.
- As you back up, frequently check all mirrors.
- If in doubt, stop and get out!





#### SAFETY EQUIPMENT FOR TRUCKS

Safety equipment technology and truck design can greatly improve public and worker safety. In addition to what is required by state and federal law, you may choose to incorporate additional equipment to improve the safety of your operations.

Industry Standard	Best Practices	Aspirational
Industry standard items are those that are either required by law or industry leaders consider essential to safe operation.	Best Practices are items that industry leaders strong- ly recommend you incorpo- rate in your operations.	Aspirational items are technologies that are worth exploring to find out how they can improve safety at your company.
<ul> <li>All safety equipment required by the FMCSA and NYS laws and regulations<sup>10</sup>, including seat belts, cross-over and other mirrors, reflectors, headlights and other lamps, service and emergency brakes</li> <li>Sideguards<sup>11</sup></li> <li>Emergency stop button</li> <li>Audible back-up alert</li> <li>LED hopper lights</li> <li>Strobe lights</li> <li>Reflective tape and logos</li> <li>Hydraulic safety latches</li> </ul>	<ul> <li>Warning decals (e.g. Slow Down to Get Around)</li> <li>Bottom of hopper painted with reflective paint</li> <li>High vision truck cabs</li> <li>On-board computer and GPS</li> <li>Back-up camera</li> <li>Automated toters/tippers</li> </ul>	<ul> <li>360° cameras</li> <li>Collision avoidance technology</li> <li>Pedestrian alert technology</li> </ul>

#### FAQ

Q: Does a helper riding in the cab need to wear a seatbelt between each stop?

#### A: Yes. All front seat passengers must wear seat belts.

Q: Can helpers use the rear step if they follow ANSI guidelines?

### A: No, NYS traffic law prohibits riding on the rear step under any conditions on public roadways.

Q: What do I do if my truck does not meet industry standards?

A: Some items listed under Industry Standard are strong recommendations; however, some items are required by federal, state, or local law. If your vehicle is not equipped with the items required by law, talk to a mechanic about making the necessary repairs to bring your vehicle into compliance with these requirements. If you operate your truck and are not in compliance with safety laws, you are not only breaking the law, but putting your workers and the public at risk.

## On the Collection Route

NOTES:

# **Safe Collection Stops**

Training your operators to think about safety during stops is very important. Include the following practices in your safe collection stops training:

#### SAFE STOPS

When approaching a collection stop:

- As you slow down, indicate you are about to stop by using the turn signal, strobe lights, or 4-way flashers. Pedestrians, cyclists, and motorists need to know what to expect.
- Both the driver and helper should scan all mirrors to check for bicyclists and other vehicles.
- Don't back up! If you miss a collection stop on your route, go around the block.

#### **PROPER LIFTING**

To reduce the risk of injury from lifting heavy objects, keep the following in mind:

- Take a moment to examine the load and surrounding area. If the bag is ripped or the load is too heavy, too large, or too awkward, stop and get help.
- Keep a wide base of support. Straddle the load with feet shoulder-width apart and facing the direction you want to go.
- Bend your knees and hips and keep your back straight by looking up.
- Lift slowly by straightening hips and knees while maintaining a firm, balanced grip on the load.
- Position load as close as possible without resting bags or containers directly on your body.
- Use smooth, controlled movements and avoid twisting.



Do not rest bags on your legs to help you lift the load into the hopper. Doing so increases your risk of laceration or puncture wounds from sharp debris inside the bag.

#### Safe Collection Stops

#### CONTAINER MANAGEMENT

Use these tips if the collection route includes servicing locations with containers.

#### Emptying a container into a rear-loading waste collection truck:

- Cycle the hopper to make sure it is empty before lifting the container.
- Inspect the container for damage make sure the trunnion bar or side bar "ears" are not damaged.
- Attach the trunnion bar to the pivot plate. Always use safety latches.
- Never place hands on the "ears" of the container doing so may lead to hand or finger injuries.

#### Picking up a roll-on/roll-off container:

- Inspect container for damage.
- Properly align container guide rollers with container.
- Check that the hook or other lifting attachment device is securely attached prior to lift.
- Attach container hold-down strap and cover container.



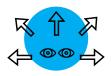
Remind employees to report damaged containers so they can be repaired or replaced. Attempting to tip a damaged container may result in serious injury.

If your company uses front-loading trucks in the fleet, consider developing a separate protocol to safely tip these containers in order to keep your employees safe.

#### **HOPPER CYCLING**

Tips for safely cycling the hopper:

- Make sure you are distraction free. No headphone or Bluetooth devices even if they are off.
- No jewelry or loose clothing the hopper could catch these and pull you in.
- Use caution and keep hands clear.
- Always stand to the side of the truck when cycling the hopper. If you stand directly behind the truck, you can be struck by the debris that is being crushed.
- Use extreme caution when cycling large or bulky items, as they may eject from the hopper.



Check surroundings before operating and be mindful of members of the public in the area.

#### FAQ

Q: How do I know if I'm lifting correctly?

A: When you use proper lifting form, you will feel the lift in your leg and hip muscles. You should not feel pain when lifting.

Q: When should I ask for help when lifting heavy objects?

#### A: Ask for help if you are not sure that you can safely lift or move the object.

Q: If a container gets "stuck" in the hopper, what should I do?

### A: Do not attempt to un-jam the container by yourself. Ask a supervisor for help.

Q: When should I cycle the hopper?

#### A: In most cases, the best practice is to cycle the hopper before it is halfway full. This reduces the risk of objects being propelled out of the hopper.

Q: What should my employees do if a container is unsafe to tip?

### A: Do not tip a container unless it can be done safely. If necessary repair the container before servicing the stop.

Q: In addition to damage to the container "ears," what type of damage should I ask my employees to report?

A: Ask your employees to report any damage to the container, including broken wheels, bent trunnion bars, and rust or rot. It is important to keep containers well-maintained – doing so will help avoid injuries. Your employees should never tip a damaged container.

#### Safe Collection Stops

NOTES:

# End of the Shift

Train your employees that a safety routine at the end of a shift and in the garage or yard is just as important as when they are out in the field.

#### **DRIVER VEHICLE INSPECTION REPORT**

At the end of each shift, FMCSA and NYS DOT regulations require drivers to complete a written Driver Vehicle Inspection Report (DVIR).<sup>12</sup> This report must identify the truck and list any defects that would affect the safety of operation or result in a breakdown. At a minimum, the report must cover the same parts and accessories covered under the pre-trip inspection. Managers may also want to include a comment section on this form. It allows the driver to make notes and summarize items that do not pass the inspection. Flip to the back to see a sample DVIR.

#### What happens if the driver finds a defect?

If the driver identifies a defect that is likely to affect the safety of the truck's operation, it must be repaired before the truck can be put back on the road. The mechanic who repairs the defect must certify that he either made the repair or that the repair is not necessary by signing the inspection report. After any necessary repairs have been made, the truck can be put back on the road.

#### Who has to sign the DVIR?

Both the driver at the end of the shift and the driver who will operate the truck during the next shift must sign the DVIR. Your mechanic is required to sign the DVIR when a defect is listed to either certify the necessary repairs have been made or that the defect does not affect the safe operation of the truck.

End of shift tips for your drivers:

- By the end of a shift, the hopper may have been cycled up to 100 times. Perform a thorough inspection of the hopper and hydraulics as part of your DVIR.
- Cleaning out the cab and vacuuming the floor at the end of the shift keeps the dash clear and prevents debris from building up under the brake pedal.



Safety Meetings are Key: Get everyone together at the start of a shift to go over the pre-trip inspection and DVIR. This will remind everyone why these steps are so important.

### the Sh

#### GARAGE AND YARD SAFETY

As you train your staff, don't forget about the time spent at the garage or yard.

#### Make a Plan:

Develop methods to safely move trucks in and around the garage or yard. This may include having regular traffic patterns and traffic directors, developing uniform hand signals to guide trucks through tight spaces or blind corners, and requiring employees to wear high-visibility clothing when in the garage or yard.

#### Hazardous Materials:

Garages or yards can have anti-freeze, diesel or gasoline, grease, hydraulic fluid, solvents, and other chemicals. Train your employees on how to safely handle these hazardous materials and make the safety data sheets (SDS) easily accessible at your garage or yard location.<sup>13</sup>

#### Safety Training:

Provide basic safety trainings such as fire safety, including how to use fire extinguishers and emergency exits. Other topics, such as ladder safety and truck lifts, as they apply, are important. If your garage or yard is a fueling station, staff should be trained in safe fuel and storage practices and spill prevention.

#### **PREVENTATIVE MAINTENANCE**

To keep your trucks running smoothly and safely, develop a preventative maintenance schedule in addition to your daily pre-and post-trip inspections. These regular checks should identify any needed maintenance. Either follow the manufacturer's recommended maintenance schedule or perform a "major" pre-trip inspection every 40 days.<sup>14</sup>

Use experienced mechanics who are familiar with the make and model of your trucks. If you have your own mechanics on staff, provide frequent training on new diagnostic technology and equipment. Garage Safety Equipment





Keep a defibrillator, first aid kit, fire extinguisher, and safety data sheets accessible and with clear signs marking their location. It is a good idea to have an eye wash station.

Reminder: Always follow FMCSA regulations on when to take an unsafe truck out of service.

#### FAQ

Q: Where do I get safety data sheets (SDS) for hazardous materials?

A: OSHA rules require that the chemical manufacturer, distributor, or importer provide an SDS for each hazardous chemical. The SDS includes information about the hazards, protective measures, and precautions for each chemical. Under OSHA rules, employers must make sure SDS for all hazardous chemicals used in the workplace are easily accessible to all employees. For more information visit www.osha.gov.

Q: I'm a very small company. Do I still need to complete DVIRs?

A: Depending on the number of trucks your company uses, you may not be required to complete a DVIR. However, even if you are not required by law, completing the DVIR will help keep all New Yorkers safer on the roads. For more information about DOT and FMCSA regulations, please visit www.dot.ny.gov/divisions/operating/osss/truck and www.fmcsa.dot.gov.

Q: My driver identifies a safety defect on the DVIR. My mechanic says nothing is wrong. What do I do?

A: If your mechanic inspects the truck and finds that nothing is wrong or that the defect does not affect the safe operation of the vehicle, the mechanic must sign the DVIR certifying that no repair was needed. After your mechanic does this, the truck can be put back into operation.



NOTES:

# **5** When Things Go Wrong

The goal of a comprehensive safety training is to prevent collisions and work-related injuries. However, in the event that there is an incident that results in dangerous conditions, an injury or a fatality, your staff should be prepared to respond quickly.

### BREAKDOWNS

Train your employees to follow these steps to keep themselves and the public safe in the event of a truck breakdown:

- Pull over out of the flow of traffic when possible.
- Maximize visibility: turn on your four-way flashers and put out an emergency triangle.
- Call dispatch for assistance as soon as your vehicle is stopped and safely secured.
- Turn off hydraulic valves if you are able to do so safely. However, do not put yourself in danger.
- Keep members of the public away from the vehicle.

### COLLISIONS

Collision scene best practices:

#### Be prepared!

Train drivers and helpers how to respond to collisions. Keep the following equipment in the truck:



#### PREPARE A COLLISION PACKET

This should include a step-by-step guide for the driver and helper to follow in the event of a crash, helpful phone numbers like company supervisors and utility providers, a company contact card to provide to the other parties involved in the crash, vehicle regristration and insurance card, and a camera to document the collision.

If you are involved in a serious collision:

- Stay calm and immediately call 911.
- Stay at the scene and set up your emergency triangle.
- Position yourself in a safe location.
- Contact dispatch.
- Provide company contact information to other parties.
- Wait for NYPD to arrive.

*Important note:* Under certain circumstances after a collision, drivers are required by FMCSA and NYS DOT regulations to undergo drug and alcohol testing. Here are the circumstances in which you must test your driver under these rules:<sup>15</sup>

Type of Injury or Damage as Result of Crash	Citation Issued to the CMV Driver	Test Must Be Performed by Employer
Human Fatality	No	Yes
Bodily Injury With Immediate Medical Treatment Away From the Scene	Yes	Yes
Bodily Injury With Immediate Medical Treatment Away From the Scene	Νο	Νο
Disabling Damage to Any Motor Vehicle Requiring Tow Away	Yes	Yes
Disabling Damage to Any Motor Vehicle Requiring Tow Away	Νο	Νο

If there is only property damage: Exchange information such as driver's license, insurance, registration and if damage is over \$1,000 file an NYS Accident Report (Form MV-104) within 10 days. If the driver tests positive or refuses the test, the driver is subject to additional drug and alcohol testing. For more information about FMCSA and NYS DOT required drug and alcohol testing, visit www.fmcsa.dot.gov and www.dot.ny.gov.

**Safety is Number One:** Go above and beyond the FMCSA requirements. Administer a drug and alcohol test to your drivers following every collision that results in an injury or if you believe your driver may have been at fault.

*Important Note:* No one wants to deal with a collision, but when one happens, try to learn from it. Create a collision review team to analyze collisions and how you can improve safety equipment and driver training to prevent future collisions.

#### **FIRES**

Train your staff to take the following measures:

#### **Engine:**

If you suspect there is an engine fire, pull over immediately, turn off the engine, and engage the work brake. Keep the area around the truck clear and assess the situation. Use a fire extinguisher to smother the fire if you can do so safely.

If you are not able to smother the fire, move away from the vehicle and call 911.

#### Hopper:

A fire in the hopper is a potentially volatile situation. If you suspect there is a fire, do not cycle the hopper, as it could cause the truck to explode.

It may become necessary to dump the load to control the fire, but never dump the load if it contains hazardous material.



Not sure what to do? Call **911** and wait for instructions from FDNY and NYPD.

## ACCOUNTABILITY

Demonstrate to your employees that safety – their's and the community's – is your number one priority by rewarding safe behaviors and coaching workers to improve unsafe ones.

#### **Reward Safe Practices:**

Show your appreciation by recognizing workers for a job well done. Drivers who have safe driving records (one, five, ten, or fifteen years) can be recognized or given a token of appreciation. When a worker makes a suggestion that improves safety at your company, they should be acknowledged and others should be trained in the practice.

#### Written Expectations:

It is important to provide clear directives for your workers and to develop company-specific policies, in addition to following all federal, state, and local laws. You should have a protocol that allows for a graduated range of responses if your workers do not follow your rules. Here is a good place to start:

- 1. Place safety infractions on a scale from preventable to severe.
  - Preventable may include clipping a mirror on a parked car, but reporting it when returning from the shift.
  - Events on the serious end of the scale are those that include risk of loss of life or serious injury or serious property damage.
  - The most severe safety infractions include failure to report a collision, a positive drug test, or behavior that is grossly negligent or results in the loss of the driver's CDL.
- 2. Keep track of all safety infractions for each worker over a rolling 12-month period, so you can detect patterns.

- 3. Determine the appropriate response for each safety infraction and communicate this system in advance. Some examples of a progressive disciplinary system are:
  - First step: Provide a verbal or written warning to the worker and discuss how the unsafe behavior can be corrected. You may choose to provide multiple warnings.
  - Second step: If the behavior persists or is serious, then suspension or other monetary penalties like reduced pay may be necessary.
  - **Third step:** If behavior continues to persist or is severe, termination may be necessary.

### FAQ

Q: What utility company contact information should I include in my collision packet?

#### A: Utility providers that service NYC are:

- Con Edison: 1-800-752-6633 (gas and electric); 1-800-914-9112 (steam)
- National Grid: 1-800-867-5222 (electric); 1-718-643-4050 (gas)
- PSEG Long Island (Rockaways): 1-800-490-0075 (electrical)

Q: What if my driver is involved in a collision with a parked vehicle or other property is damaged?

A: If they are not able to locate the owner, they must contact NYPD. Notify dispatch of the collision and leave a company contact card so the owner can get in contact with your company.

## When Things Go Wrong

**NOTES:** 



## **Personal Protective Equipment**

Workers must wear proper PPE to reduce exposure to workplace hazards such as low visibility at night.

Recommended:



**Reflective Shirt** 



Steel Toe Boots



Puncture Resistant Gloves



Clear Plastic Goggles

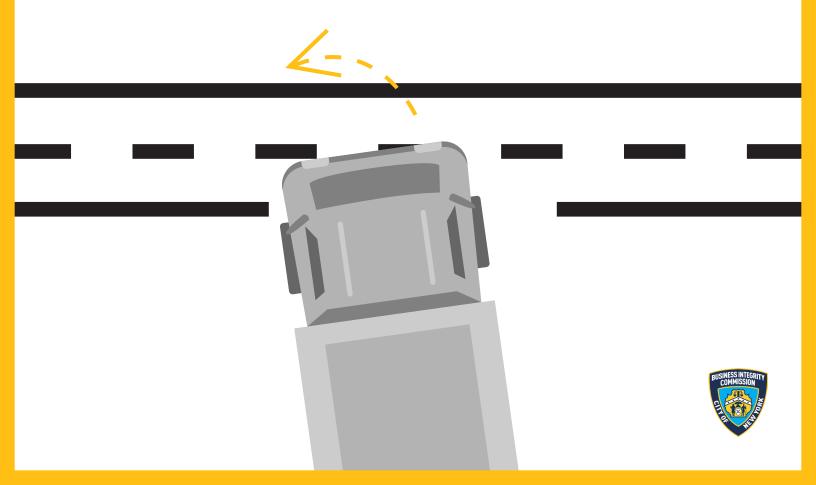




# Don't Cut Corners! Turn With Caution

For safe turns:

- 1. Use your turn signal.
- 2. Expect pedestrians in the crosswalk.
- 3. Don't turn faster than 5 mph.
- 4. Look for cyclists before you turn.





# Backing Up Can Kill! Go Around the Block

If you are in a position where you absolutely must back up:

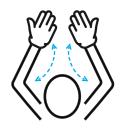
With a Helper:

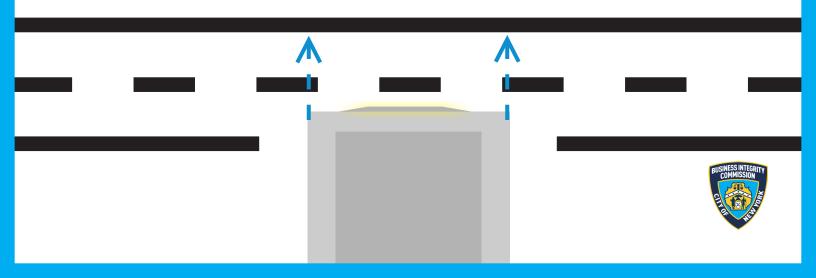
- 1. Review hand signals.
- 2. The helper should be at the rear of the truck.
- 3. Check your mirrors and stay in constant contact with the helper.

By Yourself:

- 1. Exit the truck and check surroundings.
- Back up slowly and avoid the passenger side which has lower visibility.









## **Driver's Vehicle Inspection Report**

Check Any Defective Item and Give Detail Under "Remarks."

Date	:						
Truck/Tractor No.							
	Air Compressor Air Lines Battery Brake Accessories Brakes Carburetor Clutch Defroster Drive Line Engine Fifth Wheel Front Axle Fuel Tanks Heater		Horn Lights Head - Stop Tail - Dash Turn Indicators Mirrors Muffler Oil Pressure On-Board Recorder Radiator Rear End Reflectors Safety Equipment Fire Extinguisher Flags-Flares-Fuses Spare Bulbs & Fuses Spare Seal Beam		Springs Starter Steering Tachograph Tires Transmission Wheels Windows Windshield Wipers Other		
Rem	Brake Connections Brakes Coupling Chains Coupling (King) Pin Doors		Hitch Landing Lights - All Roof Springs		Tarpaulin Tires Wheels Other		
<ul> <li>Condition of the above vehicle is satisfactory</li> <li>Driver's Signature</li> <li>Above defects corrected</li> <li>Above defects need not be corrected for safe operation of vehicle</li> </ul>							
Mechanic's Signature Date							
	-						

#### **ENDNOTES**

1. 49 C.F.R. § § 382, 391 and N.Y. Comp. Codes R. & Regs. tit. 17, § § 820.2, 820.3.

2. 49 C.F.R. § 382.207 and N.Y. Comp. Codes R. & Regs. tit. 17, § 820.2.

3. 29 C.F.R. § 1910.132.

4. 49 C.F.R. § 392.7 and N.Y. Comp. Codes R. & Regs. tit. 17, § 820.4.

5. N.Y.S. Veh. & Traf. Law § 1229-c.

6. N.Y.S. Veh. & Traf. Law § 1225-c.

7. See National Safety Council, Understanding the Distracted Brain, White Paper (Apr., 2012), http://www.nsc.org/ DistractedDrivingDocuments/Cognitive-Distraction-White-Paper.pdf. See also, Centre for Accident Research & Road Safety - Queensland, Mobile Phone Use and Distraction, (Sept., 2015), https://research.qut.edu.au/carrsq/wp-content/ uploads/sites/45/2017/12/Mobile-phone-distraction-email.pdf.

8. N.Y.S. Veh. & Traf. Law § 1233 (2).

9. N.Y.S. Veh. & Traf. Law § 1211 (a).

10. 49 C.F.R. § 393 and N.Y. Comp. Codes R. & Regs. tit. 17, § 820.5.

11. New York City Administrative Code § 16-526.

12. 49 C.F.R. § 396.11 and N.Y. Comp. Codes R. & Regs. tit. 17, § 820.7.

13. 29 C.F.R. 1910.1200 (g).

14. 49 C.F.R. § 396.3 and N.Y. Comp. Codes R. & Regs. tit. 17, § 820.7.

15. 49 CFR § 382.303 and N.Y. Comp. Codes R. & Regs. tit. 17, § 820.2.



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