

ENSURE ALL EMPLOYEES AND SUB-CONTRACTORS WORKING FOR AVALANCHE ACID REVIEW THIS NEWSLETTER.  
IT IS A KEY PART OF OUR SAFETY PROGRAM



**JUNE 2019 VOL.6**

# MONTHLY HEALTH & SAFETY NEWSLETTER

## SAFETY TOPICS

PG.1 – Intersection Safety

PG.2 – Intersection Safety  
Cont'd

PG.3 – Bill of Lading  
Information

PG.4 – Bill of Lading  
Information Cont'd

PG.5 – Bill of Lading  
Information Cont'd

PG.6 – Dangerous Goods  
Checklist

PG.7 – Lightning Safety

PG.8 – Lightning Safety  
Cont'd

PG.9 – JSA Review: Loading  
Procedures for Tri-Quad &  
Tri-Tri



## SAFETY SUGGESTIONS/CONCERNS

If there is a topic or item that you would like either reviewed in a monthly newsletter or discussed at the quarterly safety meetings; please fill out suggestions and concerns form and please drop a note in the Safety Basket and we will do our best to accommodate your safety requests.

## INTERSECTION SAFETY

**NOT ALL INTERSECTIONS ARE ALIKE. LEARN THE TYPES OF INTERSECTIONS AND HOW TO DRIVE ACCORDINGLY.**

### Railway Crossings

The most common improper driver action around railway crossings is disobeying traffic signs and signals.

#### What can you do to drive safer?

- Be prepared to stop at a highway/railway crossing
- Look both ways before crossing a railway
- Always obey the signals
- Never attempt to drive under a gate as it is closing, or around a closed gate. If the gate begins to close while you're underneath, keep moving ahead until you clear the crossing.
- If your view is obstructed for 300 metres in either direction, don't attempt to cross the track until you're certain that no train is approaching.
- Be especially careful driving during bad weather
- At a multiple-track crossing wait for a train to pass, watch out for a second train on the other tracks, approaching in either direction

### Roundabout/Traffic Circles

Roundabouts have reduced fatalities by 90%, injuries by 80%, and the total number of crashes by 40%.

#### What can you do to drive safer?

- Traffic circulates in a counter clockwise direction around a centre island
- As with any other intersection, choose the correct lane before entering the roundabout
- Slow down as you approach the roundabout, and be aware of crossing pedestrians
- Vehicles entering the roundabout must yield to traffic already in the roundabout
- Note the appropriate exit
- Maintain a safe speed, between 30 and 40 km/h, through the roundabout
- Never change lanes within the roundabout
- Signal for right turn as you approach the desired exit, while maintaining a safe speed

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## INTERSECTION SAFETY CONT'D

### Stop Signs and Flashing Lights

Sidewalks and red flashing lights at intersections and from emergency vehicles act like stop signs.

### What can you do to drive safer?

- Before entering a street from a road, alley, driveway or parking lot, you must stop
- If you see red flashing lights, yield to pedestrians and traffic at the intersection
- Treat red flashing lights as a 4-way stop and yield to the right
- If an emergency vehicle has red flashing lights at an intersection, stop and give them the right of way
- Always yield to pedestrians unless a sign says otherwise

### Urban vs. Rural Intersections

Some people think driving in the city is more risky, but 60.4% of intersection-related collisions from 2011 to 2015 happened on rural roads.

### What can you do to drive safer?

- Always obey traffic signals, even if no other cars or motorcycles are around
- Some uncontrolled intersections cross highways. Make sure to stop, look left and right for traffic, and be patient for an opportunity to cross or turn onto the highway.

### Controlled vs. Uncontrolled Intersections

Intersections may be controlled by signs, signal lights, or both. Uncontrolled intersections don't have signs or signals.

### What can you do to drive safer?

- When approaching an uncontrolled intersection, check left and right for traffic, slow down and be prepared to stop
- Yield the right of way to the vehicle on the right
- Be alert and stay visible. Other drivers may not be expecting any traffic at the intersection and that could cause a collision.
- At uncontrolled and 3-way stop intersections, drivers must always yield to the vehicle on the right
- Directions given by a police officer overrule traffic signs or signals



## BILL OF LADING INFORMATION

### ARE YOU FILLING THEM OUT CORRECTLY??

#### What is the purpose of a shipping document?

A shipping document identifies the dangerous goods being transported. In some cases, a shipping document may be required, even when placards are not.

#### Are electronic shipping documents permitted while in transit?

No. A paper copy of the shipping document must accompany the dangerous goods at all times. Although the consignor (i.e., shipper) may send electronic copies of the shipping document to the carrier, the carrier must print the shipping document before transport begins and keep a copy of the document in the vehicle while transporting the dangerous goods.

#### If I deliver a portion of the load, do I need to update the quantity on the shipping document?

Yes. If the quantity of dangerous goods or the number of small means of containment (i.e., capacity of 450 L or less) changes during transport, the carrier must show the change on the shipping document or on a document attached to the shipping document.

Below is an example on how a person could show the change on a shipping document:

UN number	Shipping name (If applicable, Technical Name)	Primary Class	Subsidiary Class	Packing Group	Toxic by inhalation	Total Quantity (kg, L, NEQ, or articles)	Number of packages requiring labels
UN3526	Hydrogen selenide, Adsorbed	2.3	2.1		Toxic by inhalation	✍ 4	✍ 4

However, if the quantity of dangerous goods in a means of containment is less than 10% of the maximum fill limit, the words "Residue – Last Contained" may be added before or after the description of the dangerous goods instead of the quantity of dangerous goods.

#### What kind of information is listed on the shipping document?

As a minimum, the shipping document must contain:

- Consignor's name and address in Canada;
- Date of shipment;
- Description of the dangerous goods in the following order:
  - UN number (e.g., UN1230);
  - Dangerous goods shipping name (e.g., Methanol); **(MUST STATE EXACTLY WHAT IS ON THE SDS)**
  - Primary class and subsidiary class (e.g., 3(6.1)), with the compatibility group letter, following the primary class, for explosives;
  - If applicable, the packing group in roman numerals (e.g., I, II or III);
  - If applicable, the words "toxic by inhalation" or "toxic – inhalation hazard" for dangerous goods subject to Special Provision 23.
- The quantity in metric measurement (e.g., kg or L) for transport originating in Canada;
  - For Class 1, Explosives, the quantity must be expressed in net explosives quantity (NEQ) in kg. For explosives subject to Special Provision 85 or 86, it must be expressed in number of articles or NEQ.
- The "24-hour number" of an individual who can provide technical information on the dangerous goods; and
- The consignor's certification.

## BILL OF LADING INFORMATION CONT'D

### When describing the dangerous goods on a shipping document, how must I display the UN number?

Subsection 3.5(1) of the TDG Regulations states that you must place the UN number of each dangerous goods:

- before the shipping name (UN1203, GASOLINE, Class 3, PG II).

### When describing the dangerous goods on a shipping document, how must I display the words "toxic by inhalation" or "toxic – inhalation hazard" for dangerous goods subject to Special Provision 23?

Special Provision 23 of the TDG Regulations refers to Subparagraph 3.5(1)(c)(vii) regarding the shipping document requirement related to the words "toxic by inhalation" or "toxic – inhalation hazard". Therefore, you must place the words "toxic by inhalation" or "toxic – inhalation hazard" on a shipping document immediately after the description of the dangerous goods, found in Paragraph 3.5(1)(c).

Below is an example on how a person could display the words "toxic by inhalation" or "toxic – inhalation hazard" on a shipping document:

UN number	Shipping name (If applicable, Technical Name)	Primary Class	Subsidiary Class	Packing Group	Toxic by inhalation	Total Quantity (kg, L, NEQ, or articles)	Number of packages requiring labels
UN3526	Hydrogen selenide, Adsorbed	2.3	2.1		Toxic by inhalation	5	5

### What is a consignor's certification?

Essentially, a consignor's certification is a statement on the shipping document which confirms that the dangerous goods have been properly classified, packaged and labelled with safety marks according to the TDG Regulations.

The certification must be made by the consignor or by an individual acting on his or her behalf. The name of the consignor (or representative) must be indicated on the shipping document.

The certification appearing on the shipping document must be one of the five proposed certifications in Subsection 3.6.1(1) of the TDG Regulations. Here is an example:

"I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, are properly classified and packaged, have dangerous goods safety marks properly affixed or displayed on them, and are in all respects in proper condition for transport according to the Transportation of Dangerous Goods Regulations."



# MONTHLY HEALTH & SAFETY NEWSLETTER

## BILL OF LADING INFORMATION CONT'D

**REQUIRED INFORMATION IS HIGHLIGHTED IN YELLOW**

### SHIPPING DOCUMENT

Consignor (Shipper) Name: Address:	Consignee (Destination) Name: Address:
DATE:	Point of Origin:
Name of Carrier:	Shipping Document #:
Transport unit #:	

### REGULATED DANGEROUS GOODS

24-HOUR NUMBER:				<i>(Only if applicable)</i> ERAP reference #: ERAP telephone number:			
UN number	Shipping name (If applicable, Technical Name)	Primary Class	Subsidiary Class	Packing Group	Toxic by inhalation	Total Quantity (kg, L, NEQ in kg, or articles)	Number of packages requiring labels

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, are properly classified and packaged, have dangerous goods safety marks properly affixed or displayed on them, and are in all respects in proper condition for transport according to the Transportation of Dangerous Goods Regulations.

\_\_\_\_\_

Shipper's name

### NON REGULATED DANGEROUS GOODS

Packages	Description of articles	Weight

Received in apparent good order Consignee's signature _____	Driver's #: _____ Driver's signature _____
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## Dangerous Goods Classes

### 1. Explosives



### 2. Gases



### 3. Flammable Liquids



### 4. Flammable Substances



### 5. Oxidizers / Organic Peroxides



### 6. Toxic / Infectious Substances



### 7. Radioactives



### 8. Corrosive



### 9. Miscellaneous



## Dangerous Goods Checklist

**Does the shipment contain dangerous goods? If so, does the shipping document include:**

- The date?
- Shipper's name and address ?
- Shipper's 24 hour number?
- Number of packages?
- Quantity of dangerous goods and unit of measure? (Must be metric)

**Are the dangerous goods described by:**

- Shipping name?
- Class? (primary class first and secondary classes, if any, in brackets) - for Class 1: compatibility group, after class and division
- UN number? (eg. UN1203)
- Packing group, if applicable? (I, II, or III)

**Is the description in the correct order?**

- UN number first? (UN number, shipping name, class, packing group)

**If required, does the shipping document also contain:**

- Emergency response assistance plan (ERAP) reference number and phone number?
- For radioactives, any other information required?

**Does the package or container:**

- Show any signs of leaks or damage? If so, do not transport it.

**Does the package or container display:**

- A label for the primary risk?
- A label for each subsidiary risk?
- The shipping name?
- The UN number? (on or beside the primary risk label)
- A certification safety mark, if required?

**If placards are required:**

- Are there at least 4 placards? (and spares in case any are lost or damaged)
- Does the Un number appear on or beside the placard? (if required)
- Is my training certificate valid?
- Issued by my current employer?
- Issued within the past 3 years?
- Signed by me and my employer?

**Optional documents:**

- A Permit for Equipment Level of Safety
- A copy of the safety data sheet (SDS) for the dangerous goods
- The Emergency Response Guidebook or a copy of the page that applies to the dangerous goods

## LIGHTNING SAFETY

Lightning is a giant spark of electricity in the atmosphere between clouds or between a cloud and the ground. It is a dangerous natural force. Lightning strikes can severely injure or kill workers whose jobs involve working outdoors.

Lightning can cause injuries in several ways:

<b>Direct Strike</b>	Victims may sustain a direct strike, which is often fatal
<b>Contact Injury</b>	Occurs when lightning strikes an object the victim is touching
<b>Side Flash</b>	Occurs when lightning splashes or bounces off an object onto the victim
<b>Ground Current</b>	Occurs when lightning strikes the ground near a victim and the ground current passes from the strike point through the ground into the victim
<b>Streamer</b>	Burst if energy can come up from objects near the ground; sometimes these streamers travel through people
<b>Blast Injury</b>	An injury from lightning's blast effect, or thunder

Lightning injuries include heart attacks, blunt trauma, temporary neurological syndromes, muscle injuries, eye injuries, skin lesions, and burns.

Jobs that could potentially expose workers to lightning include:

- Logging
- Explosives handling or storage
- Heavy equipment operation
- Construction
- Plumbing and pipe fitting

Workers whose jobs involve working outdoors in open spaces, near tall objects, or on or near explosives or conductive materials are more likely to be exposed to lightning.



Your company should train all workers on lightning safety. Supervisors and workers should understand lightning risks, characteristics, and precautions to reduce workplace hazards. Proper planning and safe practices can increase lightning safety when working outdoors.

Your company's emergency action plan should include a written lightning safety protocol, which may include:

- How supervisors and workers should take action after they hear thunder, see lightning, or notice any other warning signs of an approaching thunderstorm
- How workers are notified about lightning safety warnings
- Locations and requirements for safe shelters
- How to determine when to suspend and resume outdoor work activities

## LIGHTNING SAFETY CONT'D

Companies and supervisors should check NOAA weather reports and radio forecasts for all weather hazards before beginning work. OSHA recommends that companies consider rescheduling jobs to avoid workers being caught outside in hazardous weather conditions.

When working outdoors, supervisors and workers should continuously monitor weather conditions. Lightning is unpredictable and can strike outside the heaviest rainfall areas or up to 10 miles from any rainfall.

If signs of approaching thunderstorms occur, workers should not begin any task they cannot quickly stop. Companies and supervisors should know and tell workers which buildings to go to if they hear thunder or see lightning.

NOAA recommends seeking out fully enclosed buildings with electrical wiring and plumbing. If safe building structures are not accessible, companies should guide workers to hard-topped metal vehicles with rolled up windows. Remain in the shelter or vehicle for at least 30 minutes after hearing the last sound of thunder.

Do not shelter in sheds, pavilions, tents, or covered porches. They do not provide enough protection.



After you hear thunder, do not use corded phones unless it is an emergency. Cell phones and cordless phones can be used safely.

Safe practices if you are caught outside during a thunderstorm include:

- Seek shelter immediately
- Do not lie on the ground or under a tree
- Avoid open fields
- Retreat to low-lying areas like valleys and ditches; watch for flooding
- Stay away from all metal objects, equipment, and surfaces that can conduct electricity

If you see someone get struck by lightning, immediately call 911 for help

Lightning is a serious threat to workers who work outdoors. Your company should have a plan in place for what to do during severe weather. Remember, when thunder roars, go indoors.

The supervisory staff on-site will determine when a storm is close enough for the lightning to pose a safety risk to the site personnel. Supervisory personnel will use the Flash/Bang (F/B) technique to help measure storm proximity.

The F/B technique states that for every count of three from the time of seeing the lightning stroke to hearing the associated thunder, lightning is one kilometre away. A F/B of 9= 3 Kilometres (approximately 2 miles); a F/B of 15=5 kilometres (approximately 3 miles), etc.





# MONTHLY HEALTH & SAFETY NEWSLETTER

## BRENNTAG CANADA (GRANDE PRAIRIE) LOADING PROCEDURES FOR TRI-QUAD AND TRI-TRI

**Tools/Equipment/Material Required:** Tank truck

#	Job Steps	Hazards Associated	Controls	Persons Responsible
1.	Pull up to security gate, exit truck and sign in the office before entering the gate <ul style="list-style-type: none"> <li>Once signed in the Loader will give directions to loading pad, Muster Points, Shower and first aid kits are located</li> </ul>	-Watch for equipment or people moving - Slip, Trip and Falls	-Be aware of your surroundings - Park on level ground and away from congestion if possible - Maintain 3 point contact	Operators / Drivers
2.	Proceed through the gate, stay to the Right and follow the tanks around to the left, come back out in front of the tanks on the loading pad. Once parked Apply all PPE stated in "Controls" section.	- Congestion - Other people/vehicles - Slip, trips and falls	- Have a spotter when in tight areas - Watch for other equipment and personal on the ground - Maintain three-point contact and utilize traction aids if required - Engage park brake	Operators / Drivers
3.	Speak with the Loader about how the compartments will be split from Truck compartments to Wagon.	- Miscommunication	- Always double check where to load and verify the procedures when unsure	Operators / Drivers
4.	Prior to loading set out chock blocks and ground cables. Set out drip trays under vent line and hose connections. Ensure all fittings are stainless steel and acid compatible. Connect load hose to appropriate container to load chemical <ul style="list-style-type: none"> <li>Brenntag will put out Pylons on the front and back of trucks which indicates Loading Operations. Also, Change Drip Trays under Vent Lines to Buckets hanging from Vent Lines.</li> </ul>	- Watch for chemicals on the ground, totes with chemicals, vapors. -Watch for equipment or people moving - Slip, Trip and Falls	- Ensure proper PPE-- Fire Retardant Coveralls, FULL pants and jacket (Zipped Up), Safety goggles and full-face shield and chemical Gloves. Note – Full face respirator is accepted but not required at this site. - Be aware of your surroundings -Watch for trip hazards and spills	Operators / Drivers

Safety Items Required		Risk Assessment		
<b>X</b>	Basic PPE - Hard Hat, Safety Glasses, Gloves, Steel Toed Boots, FR Coveralls, Ear Plugs	<p style="text-align: center;"><b><u>MEDIUM HAZARD– POST RISK ASSESSMENT</u></b></p> <p><b>A condition or practice likely to cause:</b></p> <ul style="list-style-type: none"> <li>An injury resulting in time off from work for any period of time</li> <li>A moderate loss or damage of property, equipment, or vehicles</li> <li>Substantial loss of company or client revenues greater than \$1,000.00</li> <li>A serious environmental release that requires regulatory reporting</li> <li>Any media, or third party coverage</li> </ul> <p><b>Action to be Taken:</b> The hazard should be considered serious and some form of action taken</p>		
	SCBA/SABA			Goggles / Face Shield
	Signs/Barriers			Apron / Rubber Gloves
	Lock Out			Harness / Fall Protection
	Permits			First Aid Kit
	Ventilation			Fire Extinguisher
	Reflective Vest			Spotter