

FORENSIC ENGINEERING NEWS AND VIEWS

President's Box

December 2023



By Rene Caskanette

At long last, this will be my final president message for the company as changes happen in 2024.

In July we celebrated our 25th anniversary, a milestone I am proud of. We celebrated with a company outing to Stratford for dinner and a show, great fun and team building.

We are progressing well with a transfer of ownership from Jeff Udall and myself to a group of senior employees. When the process is completed on Feb 1, 2024 you will hear more details on a rebranding program. This well planned change, which began in 2017, will ensure a seamless transfer to the next generation of employee owners, who will continue to offer the same excellent services our customers have come to expect.

I will stay on as chairman of the board to offer management and engineering advice to the new ownership group. Jeff Udall will stay on as a senior engineering consultant but take on much less work as he starts the retirement process. In the spring our office manager Gail Tomka will also be retiring leaving the job with her very able assistant

Carolyn Winsborough.

Bob Caskanette will take on the president job for the corporation, with Alex Caskanette moving into the treasurer role and Jason

Richards will be the corporate secretary. Micheka Kostyniuk VP, also sits on the board as a senior partner, and will resume work duties when she returns from her leave next summer. Other senior experts have been offered equity positions as associates and the ownership team could be expanded as decisions are made on the offers.

As a founder it is nice to see an exit plan come to fruition, with employees eager to take the reins, and a bright future ahead for the employees and the corporation, to the benefit of the clients who rely on our services.

You may still see me around as I still have some old files and trials to finish off, but more time on the golf course and traveling the world with my wife and company co-founder Kate are planned, to enjoy the golden years we have worked so hard for over the years. It has been a real pleasure.



A Note from Retiring Partner, Jeff Udall

My time with Caskanette Udall Consulting Engineers is soon coming to an end. As of February next year, I will be moving into the next chapter of life, better known as retirement.

My years with Caskanette Udall have been very rewarding. I have met many people over the past 25 years and established some great relationships, both professionally and personally. I will miss many of the interactions that I've had.

From figuring out who crossed the center line in a motor vehicle accident, to determining why a hog barn floor collapsed, the range of files that I've worked on has been vast. Forensic Engineering is an incredible field. The only consistent part of this job is that every file is unique. I've always felt that the core goal was to help people, even if the answer I was giving was not what they wanted to hear. I can only hope that I left each file having educated people and provided a degree of clarification to enable a good resolution for all parties.

The company has grown and thrived, and is ready to be taken to the next level with the new ownership group. We have some remarkable talent on board. I feel very confident that the new company will be taken to a higher level and become bigger and better than ever.

Signing off! Thank you for all the good years.

Jeff



Jeff Udall

Slips, Salt, and Solutions

By Erik Mahon



With winter coming around the corner and bringing ice and snow with it, it is important to pay attention to ice formation on walking surfaces both as an owner and a user. A slip and fall on ice

can result in significant injuries. As a result, there are several codes and standards in place to keep ice levels down in order to ensure safety. Preventing ice build-up is a continuous and multi-step process; Weather logs must be monitored for freeze-thaw events or freezing rain warnings, salt must be applied and snow removed, and regular inspections must be conducted to ensure that ice does not reform at a later point.

When a slip and fall occurs there is sometimes some ambiguity as to who was responsible for dealing with the ice at that particular location. Parking lots are the most clear; with the owner often responsible for all maintenance on their own property, but public sidewalks can get complicated. The City is usually only responsible for specific sidewalk winter

maintenance, usually in a downtown or high traffic area, and leaves the rest under the responsibility of either the homeowners or businesses located in front of the sidewalk. But at the same time, the City is often required to enforce winter maintenance even if they are not directly responsible for the maintenance themselves and can still be held responsible for a lack of enforcement. But that is where the lawyers come in, so let us move towards the science of ice removal.

Ice can form in many different ways and must be monitored closely to ensure that it does not reach dangerous levels. While the most common way for ice to form is directly through freezing rain or another immediate weather event, there are many more factors at play. Ice can form due to melting snow refreezing on the ground if the air temperature is higher than the ground temperature. It can also form due to temperature changes throughout the day that create a freeze-thaw event. Lastly, while salt is generally considered the best way to deal with ice buildup, improper salting can cause icy conditions as well.

When salt is applied to ice it mixes with water to form a brine. This water can come from ice, snow, rain, or even the humidity in the air. The salt and water form a brine solution which has a lower freezing temperature than normal

water, preventing ice formation on the applied surface. However, as a brine solution absorbs more water it will dilute, raising the freezing point until the solution is barely lower than the original water. It is for this reason that salting must be re-applied regularly and heavily enough to remain effective.

We at Caskanette Udall often encounter slip and fall claims where a single application of salt was applied to a walking surface in the early morning and then was not re-applied throughout the rest of the day. In these cases, the moisture from the snow, rain, or meltwater that was present throughout the day diluted the brine solution to the point where it was no longer effective and ice was allowed to reform on the walking surface. It is therefore important to understand the science behind how salt works and not assume that one application is good enough for a whole day in any weather condition. Ideally, salting should be paired with regular inspections in order to ensure that the applied salt is still effective and touch it up as necessary.

It is important to stay safe from both a physical standpoint and a safety standpoint. Having an awareness of how ice removal works and what requirements are expected of you is a worthy investment as we head into the winter season.

Safety and Environmental Hazards During a Complex Fire Scene Investigation

By Bob Caskanette



I am licensed (LET) through the Professional Engineers of Ontario (PEO) in both Forensic and Environmental engineering disciplines. On the forensic

engineering side I'm licensed in fire and explosion investigation of structures, vehicles and equipment. While on the environmental side I'm licensed in a variety of areas including spill remediation of soil and water, indoor air quality (IAQ), mould and designated substances such as asbestos/hazardous materials projects. I am the only person I'm

aware of in Ontario to be licensed within both fields, which offers me a unique perspective when it comes to fire and explosion cause and origin investigations. I'm often retained to undertake the fire cause and origin investigation and then also attend to undertake a designated substance survey (DSS) and smoke mapping and delineation of combustion by-products to assist in developing a scope of work for how to remedy the structure, while also safeguarding the health and safety of building occupants and workers and abiding by the necessary laws and regulations within the Province of Ontario.

I recently lectured on the topic of this article at our recent Canadian Association of Fire Investigations (CAFI) two day fall seminar, held in Niagara Falls, ON in October 2023. The presentation was met with a lot of enthusiasm by seminar attendees as this is a topic which is

simply not discussed enough or that some people unfortunately choose to ignore. I am also the VP of the CAFI Ontario Chapter 006 who put on this seminar and truly enjoy my role in organizing and participating in these events, ever since I joined the executive board back in 2015.

Many combustion byproducts you will be exposed to at a fire scene are carcinogenic, meaning they cause cancer. It is estimated at least 40 known or suspected carcinogens are present at a typical fire scene. Cancer remains the leading cause of death in Canada amongst the total population. An estimated 2 in 5 Canadians will be diagnosed with cancer in their lifetime and about 1 in 4 will die from cancer. In 2024, an estimated 229,200 Canadians will be diagnosed with cancer and 84,600 will die from cancer. This does not refer to persons in the field of fire and explosion

investigation, who are exposed to much higher frequencies of exposures to carcinogens.

While many long-term studies are ongoing, it has been reported that such persons are more likely to develop some sort of cancer compared to the normal population. So the need to protect yourself is all that more important.

Cancer is considered the most dangerous threat to a firefighter's (and arguably a fire investigator or persons regularly attending fire scenes) health and safety today. Cancer has reportedly caused 66 percent of the career firefighter line-of-duty deaths (LODD) from 2002 to 2019, according to data from the International Association of Fire Fighters (IAFF). Heart disease caused 18 percent of career LODDs for the same period. Firefighters have a 9 percent higher risk of being diagnosed with cancer and a 14 percent higher risk of dying from cancer than the general U.S. population, according to research by the CDC/National Institute for Occupational Health and Safety (NIOSH). The cancers mostly responsible for this higher risk were respiratory (lung, mesothelioma), GI (oral cavity, esophageal, large intestine), and kidney.

The risks are significantly higher for some specific types of cancer versus the general population. In 2013, NIOSH researchers reported a two-fold excess of malignant mesothelioma, a very rare cancer. Put another way, firefighters have a 100 percent increased risk (double) of getting mesothelioma. Firefighters have a 129 percent increased risk of dying from mesothelioma. A 2006 meta-analysis by Grace LeMasters of 32 firefighter cancer studies noted a two-fold excess for testicular cancer. Firefighters have a 62 percent higher risk of getting esophageal cancer, and they have a 39 percent increased risk of dying from esophageal cancer, according to the NIOSH research.

Here's an overview with some specific additional risks for firefighters noted:

- Testicular cancer – 2.02 times the risk;
- Mesothelioma – 2.0 times greater risk;
- Multiple myeloma -1.53 times greater risk;
- Non-Hodgkin's lymphoma – 1.51 times greater risk;
- Skin cancer – 1.39 times greater risk;
- Malignant melanoma – 1.31 times greater risk;
- Brain cancer -1.31 times greater risk;
- Prostate cancer – 1.28 times greater risk;
- Colon cancer -1.21 times great risk; and
- Leukemia – 1.14 times greater risk.

While it is not possible to discuss everything related to health and safety and hazards at a fire scene in just one article, I will try to highlight a few of the most important issues.

The first is personal protective equipment (PPE). Perhaps the most important part of PPE required in any fire scene is respiratory protection. It still shocks me that many fire investigators, contractors and field adjusters still do not wear any respiratory protection into a fire scene. We mention it to everyone we can and hope the message of the hazards present bring better awareness in this area. Various types of respiratory protection carry various assigned protection factors (APF) and some are better than others. The assigned protection factor (APF) of a respirator reflects the level of protection that a properly functioning respirator would be expected to provide to a population of properly fitted and trained users. For example, an APF of 10 for a respirator means that a user could expect to inhale no more than one tenth (1/10) of the airborne contaminant present, or 10%. An APF of 100 therefore means 1/100 or only 1% leakage/exposure, an APF of 50 (1/50) means only 2% and an APF of 1000 = 0.1% exposure. So the higher the APF, the better protected the user is. Again, this assumes the respirator is functioning properly and is fit tested for the user and the user is trained in its use.

Here is a summary and some pros and cons of the most common respiratory protective devices.

- Surgical masks are loose fitting and do not provide a tight seal around the face or have the necessary filtering media/ability and are therefore not appropriate or intended to be used at a fire cause and origin investigation.
- N95 masks have openings of approximately 3 microns but are not fit tested and do not provide a perfect seal, particularly for those with any facial hair. The assigned protection factor (APF) of these masks is 5-10. These masks can typically be found at big box stores, hardware stores, safety supply companies and paint stores. They are not meant for long term repeated use. Keep these masks in a sealed plastic bag after purchase and when not in use. I do not recommend these for fire scene investigations but they are better than no protection at all.
- Half face respirators with P100 cartridges or combination cartridges that are combination cartridges with P100 as part of the combo (such as OV/P100, where OV stands for Organic Vapour) are another option. The P100 means HEPA filters are contained within the cartridge

filters. HEPA (high efficiency particulate air) filters are effective in removing 99.97% of particulates/airborne contaminants down to 0.3 microns in size. The APF of these masks is approximately 10. It only works if it fits well against a clean shaven face and has been fit tested but they are not perfect and the seal can also become compromised with certain movement, perspiration and prolonged use. This equipment can be cleaned and disinfected and re-used. It is also available from the same places outlined in the N95 mask paragraph above. It should be stored in a sealed plastic bag when not in use to reduce filter load. This type of mask is appropriate for use in a fire investigation, however there are better options which will be outlined below.

- Full face respirators are similar to half face respirators in that they require cartridges. We recommend OV/P100 at minimum. The approximate APF for these masks is 50, or 5 times that of a half face respirator. The protection factor has a considerable increase due to the second seal around your entire face in addition to just your mouth/nose, and also protects your eyes as well. This equipment can be cleaned and disinfected and re-used. It is available from the same places outlined in the N95 mask paragraph above. Keep this sealed in a plastic bag when not in use. In our opinion, this is the best cost-effective protection that should be used on a fire scene.
- A powered air purifying respirator (PAPR) and self-contained breathing apparatus (SCBA) are more specialized equipment and provide much higher protection factors. The other items listed above are more affordable. A PAPR draws air through a battery powered motor/filter and pumps it through a tube into a mask/helmet which provides a seal around the face or entire head, which therefore establishes a positive pressure within the facemask. So if the seal is broken, air comes out of the mask into the environment and does not immediately enter the mask from the environment. The APF for a PAPR is upwards of 1000 depending on design and is my go to option for all fire sites and hazardous materials projects. An SCBA is similar to a PAPR but provides a tank of oxygen rather than a filter/battery pack and is the best level of respiratory protection for fire fighters during suppression and when oxygen deficient environments or hazards that are beyond the ability of other respirators to handle are present. Otherwise they are not required for a regular fire scene investigation. The APF for a SCBA is upwards of 10,000.

I recommend the full face respirator with OV/P100 cartridges at minimum be used. Most filter cartridges do not have an indicator to tell you when they are spent so you must develop a change-out schedule to prevent breakthrough. The change-out schedule is based on the chemical concentration, physical work effort, temperature and humidity. Many respirator manufacturers have cartridge change schedule calculators available on the Internet. The OV/P100 filters (from new) will vary in how long they are good for depending on the environment you are in, but should generally be good for a fairly long time, roughly 8-12 hours of total use or as recommended by the filter manufacturer. You will be able to tell when the filters start to become loaded as breathing becomes slightly more difficult. But try not to wait that long.

Protecting skin from absorption is also important. A 2017 Blais University of Ottawa study examined chemical exposure occurring during emergency, on-shift fire suppression. The researchers found firefighters absorb harmful chemicals, including polycyclic aromatic hydrocarbons (PAHs), through their skin. Firefighters had from three to more than five times the amount of by-products of PAHs in their urine after a fire compared to before the fire. For fire investigators, nitrile gloves are useful on the job and many pairs may be needed throughout the course of the investigation. Tyvek or dedicated coveralls are also a good option. Tyvek are good for a single use only and should not be re-used. Dedicated work coveralls (if used) should be placed in a sealed container following each use if they are to be transported in your vehicle and should be dry cleaned regularly. It is important not to store them within your vehicle where contaminants present can enter the airspace easily.

Many other hazards are present at a fire scene such as physical hazards (slip, trip, open pits, falls, etc.), chemical/biological, heat stress/cold exposure, confined spaces/oxygen deficient environments, electrical/shock, structural hazards and much more.

It is also very concerning that many are still unaware of the regulations and legal requirements surrounding designated substances and hazardous materials in buildings in the Province of Ontario, such as at fire sites.

Building owners in Ontario are required under the Occupational Health and Safety Act (OHSA) to determine if there are any designated substances present at a project site prior to any construction or demolition activity. The owner and constructors are required to provide this information as part of the tendering information or to prospective



Half Face Respirator

contractors (and subcontractors) of a project before entering into a binding contract. This means that a Designated Substance Survey (DSS), either partial or full, is required for buildings prior to any materials within those buildings being disturbed or removed to legally satisfy this requirement. It is the law and not subject to our interpretation of when to obey it and when to disregard it. This applies to buildings of all ages, even ones built or renovated recently.

The regulations apply to every employer and worker at a workplace where the designated substances are present, produced, processed, used, handled or stored and at which a worker is likely to be exposed to the designated substance. Specific regulations apply to each of these designated substances above such as O.Reg. 278/05 for Asbestos projects as just one example. Asbestos is just one additional carcinogen present in debris and building materials at a fire scene which you will be exposed too if you are not protected with the appropriate PPE.

A DSS is legally required to identify designated substances (and other hazardous materials) within the work area that may present a hazard to workers or occupants if disturbed. These substances are commonly a component of building materials or equipment found within buildings. A DSS is performed by a competent person/consultant such as us. Contractors are not competent in this field and do not have the necessary credentials or licenses to undertake such assessments.

A professional and competent consultant is critical to navigate and breakdown the complex legal requirements for each individual project and to ensure a professional DSS is properly completed to protect the liability of owners, clients and contractors and to safeguard the health and wellbeing of workers and building occupants. Our team of professional engineers and specialists are happy to help navigate you through these legal requirements to protect from liability and to safeguard workers and occupants within a building. Remember, it is the law and is mandatory for all building projects.



Powered Air Purifying Respirator (PAPR)

The Need to Knows of Asbestos Work in Ontario

By Dave Giles



Working in the Insurance Industry we often witness very well managed asbestos projects, but occasionally we also find ourselves in situations where materials have been mishandled,

exposing the involved parties to unnecessary risks. In many of these situations there are often common errors that tend to repeat:

1. Lack of or improper sampling.
2. Improper handling of emergency response activities leading to disturbance of asbestos.
3. Unqualified personnel overseeing asbestos projects.
4. Illegal transportation and disposal.

Failure to follow the rules while dealing with a designated substances such as asbestos can be serious. Not following the rules can not only lead to health risks for anyone exposed, but it can potentially also lead to lawsuits, fines and even jail time.

To help educate our clients and contractors, we thought it would be helpful to explain some of the general rules that must be followed but are often misunderstood.

WHAT IS A PRE-CONSTRUCTION DESIGNATED SUBSTANCE SURVEY (DSS)?

A designated substance survey, or DSS, is a process of identifying designated substances (and other hazardous materials) within the work area that may present a hazard to workers or occupants if disturbed. These substances can be a component of building materials or equipment found within buildings.

Section 30 of the Ontario Occupational Health and Safety Act, R.S.O., 1990, c. O.1 (the Act) requires an owner to determine whether Designated Substances are present at the project site and prepare a list of all identified. The list of Designated Substances shall be provided to contractors, as part of the tendering information, prior to the commencement of work, to allow the contractors time to determine the safe handling procedures and comply with the Act.

The Act indicates a DSS must be performed by a “competent worker” as defined in O. Reg. 278/05 as a worker who, (a) is qualified because of knowledge, training and expertise to perform the work, (b) is familiar with the Act and with the provisions of the regulation that apply to the work, and (c) has knowledge of all potential or actual danger to health or safety in the work. Although it is common for contractors to collect samples at the onset of a new project, contractors do not have the necessary training, experience, or credentials to undertake such assessments. We are often involved in sites where a DSS was attempted by a contractor who mislabelled, or misidentified samples such as drywall compound and texture coat as the same material when abatement of these materials is handled differently. In other situations, there have not been enough samples collected from the area or repairs were overlooked while sampling. Or other designated substances or hazardous materials (other than just asbestos) were left out of the DSS, likely due to a lack of competency and understanding of these substances and materials.

To summarize, a DSS includes:

- A walkthrough of the facility, by a competent worker, to identify materials suspected of containing designated substances (Acrylonitrile, Arsenic, Asbestos, Benzene, Coke Oven Emissions, Ethylene Oxide, Isocyanates, Lead, Mercury, Silica, and Vinyl Chloride)
- Documentation of locations, types and conditions of the suspect materials.
- Collecting samples of suspect materials to be analyzed by an accredited laboratory.
- Providing a professional DSS report to the owner/client. The DSS report can be

provided to prospective contractors so that measures can be taken to protect workers.

Other hazardous materials which can also be assessed during a DSS include:

- Chemical Hazards – Urea Formaldehyde Foam Insulation (UFFI)
- Biological Hazards – Mould Contamination, Animal/Rodent Feces/Contamination
- Environmental Hazards – Polychlorinated Biphenyls (PCBs) and Ozone Depleting & Global Warming Substances

DO NEWER STRUCTURES REQUIRE A DSS?

Many consultants and contractors refer to the age of approximately 1986 or older as the year for needing to have a DSS completed and leave a buffer as some excess asbestos containing building materials may have been used in buildings following 1986. Most felt buildings built in the 1990's or later were fairly safe to not have designated substances present and often wouldn't undertake an assessment or have any sampling done. But this is incorrect and also illegal. While the chances of finding designated substances goes down in buildings built in the 1990's or newer, it does not disappear. We have been finding designated substances present in many buildings built in the 1990's and 2000's. Contaminated building materials and other unbanned items brought in from other countries remain an ongoing concern. The use of older building materials kept in long term storage for eventual use, could be another cause. The Ministry of Labour (MOL) who enforces the OHSA, will tell you as they have told us, **they require a DSS to be completed whenever materials are removed from any building during construction/restoration/renovation projects.** Even buildings that were constructed in the last 10-20 years. They do not have a cutoff year for this requirement as there is no way to verify what is present within a material or building without assessing it and sampling it, if needed. Assuming you know the answer is not enough. It is required and mandatory that a DSS be completed in all buildings (either partial or full to include area(s) undergoing work) to protect from potential liability and to ensure the safety of workers and building occupants.

HOW TO HANDLE EMERGENCY SITE ACTIVITIES PRIOR TO THE COMPLETION OF A DSS

The Environmental Abatement Council of Canada's (EACC) document entitled “Pre-Construction Designated Substances and

Hazardous Materials Assessments - Guideline for Construction, Renovation and Demolition Projects” describes the handling of emergency response activities on page 17.

Generally, when responding to a claim that may involve the disturbance of a DSS you must treat any unknown materials as if they are DSS containing, until samples can prove otherwise. Doing so will limit the scope of damages, protect workers and occupants, and reduce liability.

In the situation where materials such as drywall have fallen due to a water loss or fire damage, or wet materials must be removed to prevent mould, the area should be sealed off from other portions of the structure. Workers must wear adequate PPE and care should be taken to limit the migration of dust from the area. Occupants must also be made aware of the potential risk and should not remain in the area until an assessment is completed.

WORKER REQUIREMENTS

Like any business, having the most skilled and experienced person you can find to oversee the project is preferred to ensure it is completed on time and with quality.

Asbestos abatement is no different. O.Reg 278/05 requires all workers involved in asbestos work to have training by a competent person in the areas of hazards of asbestos exposure, personal hygiene, work practices and the use, cleaning and disposal of respirators and PPE. Training must also include respirator safety including the limitations of the equipment, inspection and maintenance of the equipment, proper fitting of respirators and cleaning and disinfection.

Each Type 3 project requires a supervisor who has completed a Ministry of Advanced Education and Skills Development approved course. Asbestos abatement workers who report to the Supervisor must have asbestos worker training also approved by the Ministry. Worker certification must be accessible onsite in the event of a Ministry of Labour inspection.

In addition to training, all workers must be fitted with a tight fitting facepiece respirator (OSHA 1910.134) in good working condition and fit tested prior to the project. Fit test cards must be kept with certification in the event of a Ministry of Labour inspection.

No project is the same and each has its own challenges. Experienced supervisors and workers should be able to find a solution for any problem and have the training required under the Act.

TRANSPORTATION OF ASBESTOS WASTE

When asbestos is found and an abatement is underway, the scope of removal is usually designed by the QP, while disposal is generally managed by the Contractor.

Transportation and disposal of asbestos waste falls under two main regulations, the Transportation of Dangerous Goods (TDG) Act and Ontario Regulation 347 (O.Reg. 347). Under these regulations, the following apply:

1. The Transporter must be approved to haul asbestos waste by the Ministry. Asking for a Certificate of Approval (CofA) number is a must.
2. The Driver must have TDG training with knowledge of Class 9 Miscellaneous 'Waste.
3. An asbestos spill kit must be present on the transporting vehicle including a 'shovel, a broom, wetting agent, protective clothing, a supply of six-mil polyethylene bags, bag closures and personal respiratory equipment.
4. Both sides of the vehicle and each container must be labelled with the following:

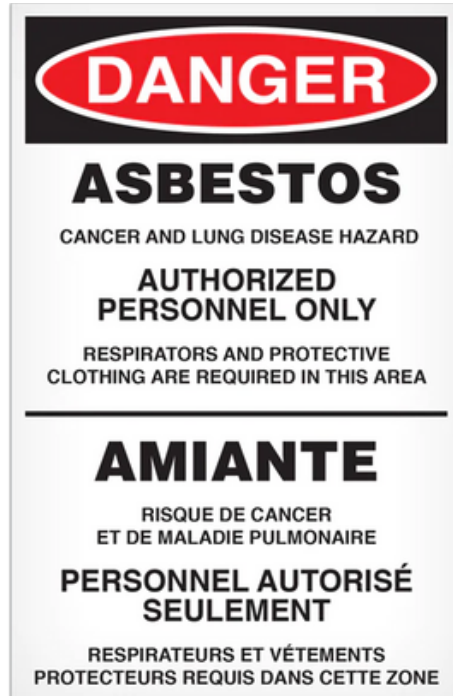
CONTAINS ASBESTOS FIBRES
Avoid Creating Dust and Spillage
Asbestos May be Harmful To Your Health
Wear Approved Protective Equipment.

5. The Waste must be shipped in rigid, impermeable and sealed containers of sufficient strength to accommodate the weight of the material. A sealed roll off bin is typically used.
6. A shipping document must be carried with the load indicating the generator, hauler and CofA number as well as the intended receiver and their CofA number.
7. The Receiver must be licensed under a CofA and be willing to legally accept the waste.
8. Once the Receiver gives approval, a date and time must be set for the load to be delivered to give the Receiver time to prepare the site and staff for the load.
9. Most Receivers have a limit on the amount of asbestos waste they can accept in a specified time.

There is a common misconception that asbestos waste can be transported in an unlabelled, unlicensed site truck or van to a contractor's yard or office where it is collected in a bin for future disposal. This cost saving

measure is often used to reduce costs and win bids. Care should be taken to ensure this does not occur during the bidding process, to avoid unnecessary penalties and delays if caught. Project managers and adjusters must ask the right questions when dealing with subtrades to confirm the waste transportation and disposal is handled and documented appropriately. For more information, please refer to Ontario Regulation 347 – Waste Management – S.17.

We look forward to assisting you on your next project.



Congratulations to our Partner, colleague and friend, Jeff Udall, as he journeys into his retirement. After almost 25 years of devoted service, Jeff leaves behind some pretty big shoes to fill. His years of experience and technical know-how will be sorely missed. On behalf of all of us, we wish you the very best, Jeff. Enjoy every moment and plan lots of adventures for this new stage in your life.

Contact Us

Caskanette Udall Consulting Engineers

248-675 Queen Street S.
Kitchener, ON N2M 1A1
519-745-5066
1-800-920-5854
info@caskanette.on.ca
www.caskanette.on.ca

Rene Caskanette
B.A.Sc., P.Eng
rene@caskanette.on.ca
519-489-2901

Jeff Udall
B.Sc., B. Eng., M.A.Sc., P.Eng
jeff@caskanette.on.ca
519-342-4569

Bob Caskanette
B.A.Sc., EP, LET, CFEI
bob@caskanette.on.ca
519-618-9044

Micheka Kostyniuk
B.A.Sc., P.Eng, CFEI
micheka@caskanette.on.ca
519-488-5454

Alex Caskanette
B.A.Sc., P.Eng, CFEI
alex@caskanette.on.ca
519-913-2066

Jason Richards
B.E.Sc., P.Eng.
jasonr@caskanette.on.ca
519-868-8081

Dave Giles
Senior Environmental Consultant
dave@caskanette.on.ca
519-496-7007

Jesse Hildebrand
B.Eng., EIT
jesse@caskanette.on.ca
519-496-5560

Erik Mahon
B.E.Sc., P.Eng
erik@caskanette.on.ca
519-496-4070

John Wells
Draftsman
519-488-0330
john@caskanette.on.ca

Gail Tomka
Office Manager
gail@caskanette.on.ca
519-745-5066

Carolyn Winsborough
Admin Asst.
carolyn@caskanette.on.ca
519-745-5066