

Avoiding the Reactive Risk Trap

**by Owen Smith*

What's inside

- **What can you do to protect your property from wildfires?**
- **Ontario Limitations Act 2002**
- **25 Phrases of Wisdom**

Article first appeared in the PULSE, December 2003. It has been reprinted with permission from Owen Smith.

It is remarkable how well society is able to pull together in order to deal with unexpected emergencies and disasters that fall upon us. Clear examples of our ability to cope with such situations include the aftermath of the World Trade Center disaster, the recovery from the power blackout, the reaction to the Walkerton water crisis and the recent Aylmer meat fiasco.

Risk Managers, in particular, usually have comprehensive and highly effective Emergency Response Procedures in place and are well equipped to recover from setbacks and emerging problems. However, what is often missing is the same sense of urgency, planning and competence when it comes to *recognizing* the risk and *preventing* it.

The same Risk Managers can be found lacking in taking proactive steps to recognize and efficiently deal with a risk with the same type of up front response.

Risk Managers tend to focus on acting with maximum efficiency and effectiveness when the risk goes wrong, but their attention also needs to be placed on preventing the risk from occurring. In order for Risk Managers to avoid this barrier, risk control systems should include a component requiring a proactive and red tape cutting emergency response.

The secret of success in these instances lies in using powerful focusing methods to identify factors which may lead to emergencies or critical problems, and providing the same type of response, which is customarily used for dealing with full-blown emergencies. Red tape is cut and the word gets to the top immediately and without bureaucratic derailments.

If all risk management systems included this component, the following scenarios could and should have occurred:

The highest decision makers in the United States would have been notified of the suspicions of the intelligence network in regard to 9/11 and would have been accountable to act on them;

The Government of Ontario would have been required to have steps in place to recognize and act upon the concerns of water and meat experts and informed parties; Electric Power officials in both the United States and Canada would have been held accountable to receive and act upon the concerns expressed in study documents and reports, which warned of just the type of problems which occurred with the blackout.

The key to making a proactive system such as this effective is accountability, the same type of responsibility, which is imposed and willingly accepted in our traditional emergency response procedures. In the courts, the accountability is clearly and forcefully recognized and imposed and that any system, which is ready for trial, must include it.

The bottom line is Risk Managers need to have systematic empowerment and accountability in place. ■

What can you do to protect your property from wildfires?

**by Gino Brunetti*



Anyone who followed the news last summer would likely recall the almost daily updates of forest fires across Canada, and in particular, the long battles fought to contain forest fires in the province of British Columbia. More recently, the brush fires in California communicated the seriousness of such disasters. In all cases, the fires illustrated the property devastation that can result.

Fires that attack the forests of Canada usually strike during periods of prolonged hot weather and low precipitation. These fires can blaze out of control for weeks or even months consuming and destroying vast areas of forest, as well as homes and businesses.

The most effective way to successfully eliminate or minimize damage, regardless of where your property is located, is to plan well ahead.

The most savvy organizations prepare well before the fire season. Long before the flame front reaches your property, radiant heat could set the buildings ablaze. Will the wind change direction? Will rains ever come? How will you save the property? Will there be enough firefighting resources?

If you begin asking such questions after you've seen the fire plume in the distance, it's too late. But if you strategize well before fire season, the odds are much more in your favor that you will be able to prevent major property damage.

Regardless of what you call them, wildfires, bushfires, wildland fires, brushfires, grassfires, or forest fires they all burn alike. Igniting suddenly, they are the only natural hazard most often caused by humans. Most fires flare up every year from careless acts. Long periods of drought fanned by high winds often set the stage. Dry vegetation adds fuel. And the spark? Maybe an arsonist strikes a match. Or a controlled fire jumps out of bounds. Sometimes heavy equipment or a discarded cigarette triggers it. A dry thunderstorm, radiant heat or lightning brought on by very humid weather ignites dry ground cover.

Flames follow an erratic path controlled by amount and type of fuel, contours of the land, and wind velocity and direction. High winds carry fire-spreading particles such as tiny pieces of grass, leaves, twigs and other vegetation under 0.25 in (6.4 mm) in diameter. Tree bark can tear off in a strong wind and travel as high as 100 yd (91.4 m) or as far as 1.9 mi (3.1 km). Even properties not directly in the line of a major fire front have burned down from just one or two small spot fires.

The other surprising feature about these types of fires is the speed. High winds can gust to hurricane forces and during a fire, gusts can become strong enough to smash windows and rip back roofing, fierce enough to drive burning tree branches or pieces of neighboring roofs through windows and walls.

*Article first appeared in the PULSE, December 2003. It has been reprinted with permission from *Gino Brunetti, P. Eng., Division Engineering Manager, FM Global Canadian Division*

Burning debris flying ahead of the fire front can fill the sky like fireworks. And embers plunging down on a roof-top or yard storage are certain to ignite many fires at once. Without outside sprinklers or hose streams, many fires burning everywhere are usually unstoppable.

Embers landing on plastic or fibreglass skylights can easily burn through them and ignite spot fires inside buildings. Sprinkler systems are designed to handle only one fire at a time, and fires starting in several places can quickly overtax a system. Emergency response often becomes a property's last chance for survival.

Radiant heat can ignite a building and furnishings near windows. Heat can shatter window glazing, allowing burning debris to blow through. Damage severity depends on how much and what type of fuel is available to burn and how much separation exists between the fire exposure and the buildings. Excessive yard storage, lack of on-site water supplies, and inadequate separation between buildings and storage or between buildings and forests or vegetation all play leading roles in severe losses.

FM Global property loss prevention engineers recommend the following seven qualities be examined to protect business property from these severe fires. If you are selecting a site for a new facility, it's easier to examine each in the following order:

1. Topography:

Locate new facilities on level or gently sloping terrain as opposed to a large slope, ridge, hilltop or gully. A building in the fire's path and at the top of a slope is in greater danger. Gullies and ground slope can substantially modify wind direction, creating turbulence and erratic fire behavior. As the slope increases, radiant heat from the flame front heats the ground fuel more rapidly than it would on level ground. Anything in the fire's path will ignite faster because of the increasing speed and intensity of the fire. Radiant heat can be reduced up to four times by doubling the distance between the exposure and the exposed buildings.

2. Design:

Take a close look at anything that can affect the severity of fire damage. Design the shape of the building to reduce the number of corners or intersections (re-entrant corners) and changes in roof profile where burning debris can accumulate and ignite. Examples are wall-to-ground intersections and wall-to-eaves intersections. Fire-seal such areas to prevent windblown debris from collecting in them. Properly protect windows, doors, vents and other openings. Seal, enclose or otherwise protect underfloor spaces.

Avoid changes in roof profile where burning debris can accumulate. As much as possible, minimize changes in roof elevation, overhanging eaves, parapets, inset windows and doors and roof valleys. Avoid gaps where sparks can enter.

3. Construction:

Use noncombustible construction for new buildings and important structures such as cooling towers. Most facilities are made of noncombustible materials, but some items are combustible. Examples: plastic or fibreglass skylights, wall paneling and outside structures made of combustible materials, such as cooling towers. Cover openings to underfloor void spaces with steel-framed screens or close-weaved bronze spark screens. Do not use aluminum or glass-fibre screens.

Without outside sprinklers or hose streams, many fires burning everywhere are usually unstoppable.

Cover vents in the walls or roofs with close-weaved bronze spark screens. Fit weep holes in brickwork with screens and fit chimneys with corrosion-proof metal screens.

Provide external doors with a minimum one hour fire resistance rating. Construct doors to stop sparks from blowing through the gaps. Doors should not have glazing. Use protective wire screening instead.

Protect windows and frames with permanently fitted, one-hour-fire-rated shutters. Side-hung and steel roller shutter types are suitable. Make sure shutters are strong enough to withstand the impact of flying debris, high radiant heat and short-term flame contact.

Avoid skylights. If they are needed, construct them of wire glass and provide external noncombustible covers for them. Insulate steel covers with 2 in (51 mm) of mineral wool.

Do not use rainwater gutters on the roof. They collect leaf debris that can easily be ignited. Use ground level drains to collect and dispose of rainwater. If gutters are necessary, they and the fascia should be made of metal. Tightly seal any gaps leading into the building with fire-retardant materials that bear the FM Approved certification mark, indicating such materials meet the most rigorous property conservation standards.

4. Yard Storage:

Strong winds and yard storage are the two worst fire exposures. Many losses result from excessive amounts of yard storage and yard storage that is piled too high or located too close to buildings. Eliminating combustible yard storage should be your top priority. In any severe forest fire, yard storage will ignite and expose the facility. If yard storage is unavoidable, keep it to a minimum and keep storage heights as low as possible and locate storage a minimum of 50ft (15.2 m) from any building. Use greater distances for certain bulk storage such as baled fiber, roll paper, baled waste paper, idle pallets, wood chips, pulpwood, logs, and flammable liquids. Also locate storage on the side of the facility opposite to the prevailing wind and separate yard storage into small blocks with at least 30 ft (9.1 m) separation between blocks. Never locate combustible yard storage under platforms. Finally, check flammable liquid storage for leakage.

5. Vegetation:

Fires start and burn rapidly in light fuels like bushes and grass, and these provide a path to trees. Once at the base of a tree, fire can move into low branches and climb to the crown.

Forest fires gain momentum by way of burning tree branches, leaves, twigs and bark traveling in the wind.

Although it's important to remove types of vegetation that ignite easily and release flying embers, some types can help minimize fire spread. Remove most but not all trees or shrubs around the property or plant them so there is no continuous canopy or line of vegetation from the brush to the buildings. Removing all trees within a clearance zone around the building is not recommended because they can slow wind speed and provide shelter from radiant heat and sparks depending on the type of trees, type of canopies, and the amount of moisture they contain.

Provide a minimum of 20 ft (6 m) between the tree canopy and power lines. Make sure all unnecessary combustible material, and flammable fuels are removed from these areas.

Eliminating combustible yard storage should be your top priority. In any severe forest fire, yard storage will ignite and expose the facility.

Trees with a more open canopy provide the best windbreak. Build a solid fence of preferably noncombustible material on the windward side of the trees to block low winds and stop ground fire spread.

Maintaining vegetation is a continuous task, but extremely important. Before and during fire season maintaining the zone of fuel reduced vegetation involves removing dead leaves, bark and twigs that are held in the trees and shrubs and lie under them; removing all dried grass; keeping grass short and green; removing trees and pruning limbs that overhang buildings; pruning lower branches of trees.

Training emergency response teams is essential. The public fire service might not get to your site when it needs protection because of demand for their services.

6. Water Supplies:

Provide an adequate on-site water supply to meet automatic sprinkler and hose stream demands. The recommended water supply duration is usually two hours, the same as the internal sprinkler design. This could be much larger from four to five hours if combustible yard storage such as large stacks of idle pallets, baled waste paper or dry timber is to be protected. In addition, provide a water supply connection to outside tanks for the local fire service to feed fire trucks.

Size the gravity tank or pump and tank according to FM Global Property Loss Prevention Data Sheets for buildings and yard storage protection. Do not totally rely on an electrically driven pump to supply the water demand because a large fire may shut down electrical utilities. Provide either a stand-alone diesel fire pump or an electric pump with a diesel backup for each pump capable of supplying full sprinkler and hose demand.

Position hydrants around the building and on the roof so every wall and roof surface and yard storage area can be reached. Provide internal hose reels to reach every part of the interior building. Provide internal small hoses of a minimum 1.5 in (38.1 mm) diameter so that all internal walls, roofs and ceilings can be reached. These hoses should be supplied by on-site water supplies.

Consider installing an open-head sprinkler system outside the building. This will protect the building walls, windows and roof, if adjacent vegetation presents a serious exposure that cannot be eliminated.

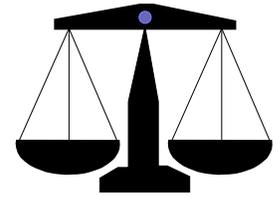
7. Emergency Response:

Training emergency response teams is essential. The public fire service might not get to your site when it needs protection because of demand for their services elsewhere. Personnel shortages can be expected in an extreme event but can also happen anytime more people need assistance than the fire fighters can provide at one time.

Fully train and equip forest fire emergency response teams to take all the appropriate actions before, during and after the fire to properly protect the facility.

Consult the local fire service for help with the training. Together, develop a written prefire contingency plan. During the visit, review access and egress paths the fire service needs when it responds to protect your property; specific communication channels, and phone numbers for prior warning during the emergency, extent and severity of the wild fire exposure to your company; and prevention and mitigation measures you should take before the event. ■

Ontario Limitations Act 2002



On January 1, 2004 the new Justice Statute Law Amendment Act took effect. It was passed by the Ontario legislature in December 2002 as Bill 213. The act is comprised of three parts, one of which is the Limitations Act, 2002.

This will replace the previous Limitations Act, which was the law that placed time constraints on individuals commencing civil actions. The reform for this change started in the 1960's and the first attempt at changing the law was put before the legislature in 1983. Several more bills followed, but none were passed until Bill 213 was put forth and was passed on the first reading, without any debate in the Ontario legislature.

The old Limitations Act had many different time restrictions, or limitation periods, depending on the type of loss or accident that was at issue or who the defendant was. Most of these anomalies were based on other statutes that took precedence over the Limitations Act. For instance, the Motor Vehicle Act provided a two year limitation period and the Municipal Act provided a six month limitation period. The Limitation Act fixed six years, for most tort and contract claims, as the period of time during which a person could commence legal proceedings to enforce a claim to remedy an injury, loss or damage from an act or omission of another. It had been based on the presumption that a claim would arise at the time at which the act or omission that gave rise to the loss took place. There were exceptions to this, such as in the case of a minor. In these circumstances, the six year period started to run when the minor reached the age of majority, not the date of the accident or loss.

There were two other major exceptions. Under the old Act, it was possible for individuals to contract out of most limitation periods. Usually where the parties changed the old Act limitation period, they reduced the period or eliminated it all together. The courts were the other influence. Over the last twenty years, in order to provide redress in situations where a claimant was unaware that a loss had, in fact, been incurred or that damages had, in fact, been suffered or where the claimant might be unaware of who caused the loss or damage, the courts developed the "discoverability" principle. This meant the point in time when the limitation period would begin to run was extended from the day on which the act or omission actually took place to that day on which the claimant was aware, or first ought to have been aware, of all the essential elements of the claim.

The new Limitations Act, 2002 will result in comprehensive change to the law of Ontario, in that the basic limitation period applicable to tort and contract claims will be reduced from six to two years. The Act states " Unless this Act provides otherwise, a proceeding shall not be commenced in respect of a claim after the second anniversary of the day on which the claim was discovered."

The two year basic limitation period applies to all claims unless the new Act specifically excepts such claims. The exceptions in the Act deal with claims by aboriginal people based on existing treaty rights and equitable claims by aboriginal people against the Crown.

This article has been prepared by Stewart Roberts, Claims Manager at CURIE with assistance from the law firms, Black Sutherland and Cassels Brock.

In addition to the basic two year limitation period, the new Act has introduced an “ultimate” fifteen year limitation period that applies to all claims. The ultimate limitation period runs from the date on which the act or omission on which the claim is based took place, whether or not the act or omission becomes known to the claimant or is, in fact, discoverable at all.

The new Act codifies the existing common law regarding when a limitation period begins to run. Under the new Act, in most cases, the limitation period begins to run on the earlier of the day in which all the elements of the claim (loss or damage/casual act or omission/identity of the defendant) are known by the claimant, and the day on which all the elements of the claim were “discoverable”, that is, when a reasonable person in the claimant’s circumstances with the claimant’s abilities ought to have been aware of all the essential elements of the claim.

One unique aspect of the new Act, provides for a potential defendant (a person against whom another person might have a claim) to serve notice on the plaintiff of the potential claim, which could start the limitation period. The court in determining when the limitation period in respect of the person’s claim began to run can consider the fact that such notice has been served.

The running of the two year limitation period is suspended in respect of minors or incapable persons (unless and until a litigation guardian has been appointed for such person). The limitation period does not start to run in assault or sexual assault cases during any time in which the claimant is incapable of commencing the proceeding because of their physical, mental or psychological condition. The running of the limitation period is also suspended where the parties have agreed to have an independent third party resolve the claim or assist in resolving it. The limitation period starts running again when the attempted resolution fails or one of the parties withdraws from the process.

This is an overview of the highlights of the new Limitations Act, 2002, which is now law in Ontario. It will be interesting to see how the courts interpret this new statute in the coming years. It is also possible, that this new legislation could ultimately shorten the length of some litigation and result in savings on legal expenses incurred in defending our Ontario members. ■

The running of the two year limitation period is suspended in respect of minors or incapable persons (unless and until a litigation guardian has been appointed for such person).



25 Phrases of Wisdom

1. If you're too open minded, your brains will fall out.
2. Age is a very high price to pay for maturity.
3. Going to church doesn't make you a Christian any more than going to a garage makes you a mechanic.
4. Artificial intelligence is no match for natural stupidity.
5. If you must choose between two evils, pick the one you've never tried before.
6. My idea of housework is to sweep the room with a glance.
7. Not one shred of evidence supports the notion that life is serious.
8. It is easier to get forgiveness than permission.
9. For every action, there is an equal and opposite government program.
10. If you look like your passport picture, you probably need the trip.

11. Bills travel through the mail at twice the speed of checks.
12. A conscience is what hurts when all your other parts feel so good.
13. Eat well, stay fit, die anyway.
14. Men are from earth. Women are from earth. Deal with it.
15. No husband has ever been shot while doing the dishes.
16. A balanced diet is a cookie in each hand.
17. Middle age is when broadness of the mind and narrowness of the waist change places.
18. Opportunities always look bigger going than coming.
19. Junk is something you've kept for years and throw away three weeks before you need it.
20. There is always one more imbecile than you counted on.
21. Experience is a wonderful thing. It enables you to recognize a mistake when you make it again.
22. By the time you can make ends meet, they move the ends.
23. Thou shalt not weigh more than thy refrigerator.
24. Someone who thinks logically provides a nice contrast to the real world.
25. Blessed are they who can laugh at themselves for they shall never cease to be amused.

CURIE Risk Management Newsletter

Published and distributed by Canadian Universities Reciprocal Insurance Exchange (CURIE), 5500 North Service Rd., 9th Floor, Burlington, Ontario L7L 6W6 ISSN 1196-085X

Telephone: (905) 336-3366 Fax: (905) 336-3373 Editor: Keith Shakespeare

Opinions on insurance, financial, regulatory and legal matters are those of the editor and others, professional counsel should be consulted before any action or decision based on this material is taken.

Permission for reproduction of part or all of the contents of this publication will be granted provided attribution to CURIE Risk Management Newsletter and the date of the Newsletter are given.