



# What's New

## Blasting Regs - Ignorance is not bliss!

In Canada explosives are regulated by the Explosives Regulatory Division of The Ministry of Natural Resources in Ottawa. For the most part, the regulations are clear and simple to follow. If you own a firearm then you already have a fairly good understanding of low explosive handling requirements. Common sense holds quite true for the majority of the federal regulations and with some attention to detail it is quite simple to remain compliant. In order to access high explosives in Canada a police background check and a federal background check are required and upon acceptance a 5-year clearance letter is granted allowing the applicant unrestricted access on behalf of a license holder. Provincially however things are not quite so simple. Ontario represents one end of the spectrum in terms of regulations. With both high and low explosives no blasting license is required to perform work, regardless of what type of work is being done. Atlantic Canada is one of the most restrictive jurisdictions in the country. With most provinces having a multiple license classification system, thousands of hours of apprenticeship work need to be completed before any blasting can be done.

*The majority of blasting regulations do not distinguish what type of explosive is used, therefore in the eyes of regulators regardless of whether your using high explosives or Nxburst™ the same type of license is required.*

Municipal levels of government in some cases have additional layers of regulations. In some municipalities a blasting permit is required within the city limits for any blasting work regardless of the explosive, a simple form and work detail that allows the city to ensure that there is no infrastructure or area specific concerns. It is an important step to understand what regulations you as a blaster need to satisfy and trying to ask for forgiveness after the fact is never the best way. High explosive suppliers are very diligent with their compliance, standard forms highlighting the required information ensure nothing gets missed. Their world is full of regulations and compliance is at the forefront, a constant reminder to ensure things are done correctly every time.

In the world of low explosives things are a little less regulated, as the product itself is safer than its counterparts. Certain regulations, especially around transportation and storage are much easier to comply with. There is one very important point to note however, blasting regulations generally do not specify the type of explosive. Does your low explosive supplier have any understanding of your local requirements? Will they guide you within the correct laws and regulations of your province, state or municipality? A good explosive supplier is not just a point of purchase, they are a resource for choosing the correct products for your application, a library of experience to draw on to support your work and most importantly a knowledgeable guide in the legal requirements you must adhere to. Before you choose a particular low explosive like Nxburst™, ask questions of your supplier. When an inspector inevitably visits your worksite, won't it be nice when you know you have nothing to worry about.





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## What are you leaving behind?

In above ground dimension stone quarries size is everything. If you are producing armour stone and ideally looking for two- and three-foot square pieces, anything under that size is lost. Sure, there is always aggregate production but scale is key. If you're not blasting directly for producing aggregates then there is a good chance that you may just be recovering your overhead and not actually generating any profits this way. Blasting in quarries is generally suited for aggregate production and extremely inefficient at producing anything other than small fragmentation. Sure, you can spread out your burdens and spacing but noise, vibration and flyrock are all now major issues for both you and your operation. The rock is also compromised as the detonation shockwave has stressed the natural seams in the rock reducing your possible production.

*We have seen upwards of 70% of a blast area lost to armour stone production because of excessive fragmentation due to high explosive use.*

Mechanical extraction is controllable in a way that explosives will never be, it allows you to apply the optimal pressure to create fragmentation, with hole patterns controlling where that fragmentation happens. It is amazing to see someone who understands the rock they are working be able to size it at will, to master it and control it. I once described the work of rock and stone cutting as the delicate application of brute force. High explosives are anything but delicate. Feathers and wedges, hydraulic splitters, even the wooden wedges used in ancient Egypt all work on the same principle, pressure, in fact explosives also use borehole pressure, just in almost instantaneous fashion.

The speed of pressure application is key to its control, the slower and more evenly applied the more precise it can be. So, what if you could find an explosive that can produce the enormous amount of pressure required to break rock but produce it slow enough to control? Could you recover more of your rock, keep more material out of the crusher? Ease the working conditions of your equipment? Even reduce the fuel they consume by providing an easier life? If it was oxygen balanced and had a greatly reduced clearance requirement could you blast on shift? Could you reduce your contamination and fines produced? Rid the mine of oversized material instead of losing equipment time to handling it? Could you reduce your equipment purchases by not needing additional machinery to handle that oversize? Would anyone be happy not having that equipment depreciating on the books?

Nxburst™ and the Fragmentor™ can do all these things. By breaking rock in tension without detonation there is no damaging shockwave to compromise the rock, there is no crush zone to account for, drift sizes can be smaller as blast holes can be placed closer to the ore rich veins and the smaller the mine the bigger the gains. Both products are oxygen-balanced that allow for on-shift blasting of oversize and development around existing infrastructure. On the surface you can recover more than 60% of the rock in your blast area. With armour stone priced at between \$50 and \$60 per ton and gravel at \$12 or less the additional revenue created by the higher recovery rates are huge. Even the classification of these products allows them to be stored simpler allowing you to keep smaller inventories which saves you money.

*Although Nxburst™ and the Fragmentor™ will never replace high explosives, and they shouldn't, there is a growing argument for their use in applications where high-explosives are just too costly.*

We would be delighted to explore the possibilities of using these products in your operations, maybe we can't help and there is no place for Nxburst™ and the Fragmentor™, but do you know what are you leaving behind?

Coogar Sales & Services is the proud distributor of Nxburst and the FRAGMENTOR throughout Canada, US and Mexico and has the stock to meet your demands. With our staff having a practical drill and blast experience we can guide you through even the most delicate of jobs safely and effectively helping you and your bottom line.  
Give us a call at (866) 762-5835 or visit [www.coogarsales.com](http://www.coogarsales.com)

