May 15, 2012

Attention: Sylwia Przedziecki and Tamara Pomanski,

Room 1405, Whitney Block/Bureau 1405, édifice Whitney
Queen's Park, Toronto, ON M7A 1A2

Please accept our written submission to for the Joint Legislative Committee reviewing the Aggregate Resources Act.
I am the Executive Director of PERL - Protecting Escarpment Rural Land. We represent a significant number of people interested in this industry and its impacts on our water sources, environment, health and quality-of-life.
Please see that this submission is presented to the Joint Legislative Committee.

Thank you

Roger Goulet, PERL Executive Director

Protecting Escarpment Rural Land:
Comments on the Ontario Aggregate Resources Act Review 2012
May 15, 2012

Protecting Escarpment Rural Land ("PERL") is a non-profit community-based volunteer organization founded and incorporated in 2005 dedicated to the protection and enhancement of the Niagara Escarpment in Burlington and Halton Region, Ontario. PERL has thousands of supporters in its mission to protect and preserve the remaining portions of the Niagara Escarpment, a vital ecological resource, and a UNESCO World Biosphere Reserve.
We thank you in advance for accepting our comments below. We expect that important and necessary changes will be made to the Aggregate Resources Act ("ARA") to re-balance competing provincial "resources of interest", with a focus on long term ecological, social and economic sustainability. It is time for the Province to develop an aggregate strategy based on appropriate uses of aggregates, environmental protection, appropriate compensation for the consumption of our best resources, conserving as much of this non-renewable resources as possible, reuse and recycling, the use of alternative materials and technologies, and extraction methods. The Province needs to phase out the extraction of aggregates from the Niagara Escarpment and the Greenbelt and help develop the infrastructures and capabilities for accessing aggregates from less environmentally and socially damaging sources. The aggregate industry must adopt world-class best practices for their operations, practices which will protect the health and safety of its workers and its neighbours, and that of the environment. Not for one second do we believe that protecting the Niagara Escarpment and supplying the Ontario market cannot be achieved in tandem.

PERL supports the work of the Coalition On the Niagara Escarpment ("CONE"), and we support the work on Green Gravel, also known as the Sustainably and Environmentally Responsible Aggregate ("SERA") standard. PERL also supports the Environmental Commissioner of Ontario’s testimony, reports and comments on aggregates and aggregate operations and management.

It is recognized that aggregate extracted from the Niagara Escarpment is of the highest quality and is needed for the most critical applications. Yet, we see this valuable resource misused in non-critical applications, for example foundation back-fill, drainage, roadway base fill, parking lots, etc. Lower grade and alternative aggregate materials would be acceptable. This high-grade material is used because aggregates are priced too cheaply. Too often, society makes its purchasing decisions on price not value, and seldom on ecological considerations.

- **PERL recommends** that future aggregates extracted from the Niagara Escarpment be subject to a $10 per tonne 'ecological surcharge', and let the marketplace sort out its procurement and the supply chain options. By placing a greater value on our best resources, we drive conservation objectives and practices forward.
It is recognized that the Ministry of Natural Resources (“MNR”) is inadequately staffed for annual inspections of aggregate pit and quarry operations. The reliance on self-assessment must be addressed: it is unacceptable and lacks any public credibility.

- **PERL recommends** the establishment of third party certification proposed by SERA, and/or the International Organization for Standardization (ISO) 9001 and 14001. This would raise the standards of operational performance to world-class levels, and provide credibility; while complementing the MNR staff resources. Operational performance can also be enhanced by eliminating “free rides” for older operators, whose operations are subject to less stringent legislation and license terms and conditions.

- **PERL recommends** that all aggregate licenses and site plans be updated every five (5) years, to reflect the latest PPS policies, regulations and standards.

The ongoing / regular inspection of pits and quarries by governmental authorities is done to assure compliance with policies, regulations and standards, and to ensure that corrective actions are taken to non-compliances. Persistent non-compliance must have consequences to the non-compliant operator. According to the evidence of the MNR in the MAQ Aggregate Co Ontario Municipal Board hearing, the Aggregate Inspector position in the Guelph MNR District Office sat vacant for months without being filled (it may still be unfilled).

- **PERL recommends** that the MNR impose temporary stop-work orders for serious non-compliance, and where necessary terminate the license. To provide a mechanism for compliance, a minimum standard for regular inspections must be introduced into legislation, along with complaint resolution guidelines.

The degree of concrete and pavement reuse and recycling in Ontario falls far short of that of other countries. We believe that this is a result of low cost virgin aggregates, making reuse and recycling more costly. Far too much of the construction material waste (some say resource) is wastefully used for new land construction, e.g. Leslie Spit in Toronto.

- **PERL recommends** that the Province develop an integrated strategy for aggregates, extending into aggregate use, which includes mandatory recycling, and incentives for reuse and recycling, and for the development and use of alternative materials and technologies. For example, why are mine tailings not used in southern Ontario for some aggregate replacement?
The practice of open-pit mining for limestone aggregate is highly destructive, eliminates entire ecosystems, removes agricultural lands and woodlands, drains our groundwater, and leaves behind permanent scars on the landscape. Ontario is a world leader in underground mining technologies, these methods should be used for mining limestone aggregates underground. The new hydro-electric supply tunnel in Niagara Falls was dug under the city. *(By the way, where did that limestone go?)* Underground mining could provide a 'close-to-market' solution for the Golden Horseshoe and Greater Toronto Area, e.g. Paris and Rome have miles and miles of tunnels (ancient quarries) under their cities, now known as catacombs. As long as aggregate companies continue the practice of open-pit extraction, there will be public opposition, costly legal challenges, lengthy resource intensive delays, and large scale destruction. Open-pit mining must stop, because there is another way to extract limestone aggregates, i.e. mining methods that do not disturb the surface features and thereby leave them intact for terrestrial uses such as ecosystem services, agriculture, green spaces, urban use, etc.

- **PERL recommends** that Ontario include non-invasive extraction as a key part of its aggregate strategy and make underground mining mandatory for new limestone quarries, thereby adopting the English model and taking resource extraction underground.

The Niagara Escarpment Plan Area (“NEPA”) was established over in 1985, or 27 years ago. The boundaries and land use designations within the NEPA have for the most part remained unchanged. This is despite changes in ecological function land use sensing technologies; changes to regulations on species at risk; a better understanding of ecosystems and hydrogeology; changes in the landscape itself; and increased pressures on our remaining green spaces, natural heritage areas and species at risk. All around us, new environmental protection regimes have sprung up on the Oak Ridges Moraine, in the Greenbelt and in Regional Natural Heritage Systems. For some vexing reason, the Niagara Escarpment is marooned on an island of antiquated land use designations. Under current regulations and standards, aggregate development companies are not required to update or upgrade the land use designations to current levels, nor apply the latest regulations and science. They too often take advantage of this shortcoming in the ARA. We have seen the MNR accept an application as ‘complete’, when in fact it was not.

- **PERL recommends** that the ARA process be integrated with the Municipal, Regional, Niagara Escarpment Commission (“NEC”)and Conservation
Authority Joint Agency Review Process. Only after all levels of government have assessed the application for a new or expanded pit or quarry, and are satisfied that the information is comprehensive and peer reviewed, can the application be deemed “complete” to proceed through the ARA process. It is important, however, that the term “complete” not be mistaken for “approved”.

Progressive rehabilitation of pits and quarries must at least keep pace with extraction. The Ontario Aggregate Resources Corporation (“TOARC”) is not rehabilitating abandoned pits and quarries at an acceptable rate. Assuming that TOARC rehabilitates 5 sites per year, with 7,000 abandoned sites, it will be 1,400 years before the past is made right, assuming no new sites are abandoned. In the case of Mt. Nemo, rehabilitation has been delayed for decades – and could be delayed again! This must be corrected.

- **PERL recommends** that TOARC oversight be turned over to the MNR, and that higher TOARC fees be charged for aggregates extracted, which would then be used to rehabilitate a greater number of abandoned sites per year.

- **PERL recommends** that current active pits and quarries be required to progressively rehabilitate their sites such that a minimum of 50% of the disturbed site has been rehabilitated.

- **PERL recommends** that complete and final rehabilitation occur as early as possible, followed by the termination of the licence and transfer of the property to the local authorities for conversion into appropriate land uses.

There is a desire by the aggregate industry to move to a "net environmental gain" approach, replacing existing natural systems with engineered landscaping plans on existing or adjacent sites. There is no mechanism to quantify the "natural capital" inventory and value of the proposed development site; therefore, no way to determine whether there actually will be a net environmental gain. The end result could actually be a net LOSS. The first tests must be the application of the Precautionary Principle, the MNR Statement of Environmental Values, and the requirement of no negative impacts.

- **PERL recommends** against the use of net environmental gain without a scientific mechanism to measure the whole ecosystem gains or losses, and asks that the development proponents demonstrate "no negative impacts". A careful calculation of the temporal gains versus losses must be included, i.e. the value of an existing ecosystem or function versus years or decades of regeneration.
More and more of our prime agricultural lands are being consumed for development, including aggregate pits and quarries. Future population growth in the world will require ever greater food production. The loss of arable agricultural land is putting future generations at risk. The amount of prime agricultural land and soils is small, and it is being reduced by development, improper land use practices and erosion.

- **PERL recommends** that prime agricultural lands not be further sacrificed to development.

There appears to be an increasing reliance on Adaptive Management Plans ("AMP") by the aggregate industry when making applications for new or expanded pits and quarries. This is problematic. It foists the potential negative effects into an undefined future, often relying on untested or unproven mitigation methods, e.g. groundwater recharge systems. The onus to demonstrate no negative impacts is on the aggregate developer, prior to being granted a licence. The application assessment and review process must provide assurances against a worst case scenario with negative impacts on people or the environment. If that cannot be done, then the application must not proceed to a hearing.

- **PERL recommends** that the use of an AMP be limited to only those potential negative impacts that are acceptable. In the case of application before the NEC, this means to the NEC’s satisfaction and not the MNR.

Unacceptable negative impacts must be forbidden, thus the application rejected.

Additionally, the increased dependence on more and more complex AMPs puts the MNR in an increasingly difficult resource bind, both from a staffing and a expertise standpoint. Will the MNR increase its field resources in hydrogeology, ecology, and wetland and woodland biology to regularly track these complex plans and inter-dependent systems in an ongoing way?

The *close-to-market* arguments are always made based on transportation by trucks but do not address the associated higher fuel usage, increased emissions and greenhouse gases, increased road damage, etc.

- **PERL recommends** that a comprehensive study be undertaken which calculates the per tonne-mile costs, the per tonne-mile emissions and per tonne-mile fossil fuel usage for each mode under study: trucks vs. rail vs. barge.
It is time to develop the facts so that a proper conclusion can be made. As close-to-market sources are exhausted, these calculations will undoubtedly become necessary. Alternative modes will require supporting infrastructure, and this will need to be amortized into the costs. Ontario’s priority should be a policy of guaranteeing close to market food first. We don’t require “close to market” sources for garbage dumping, what’s the difference?.

The operation of asphalt plants inside a below-the-water-table must be prohibited. The risk of future contamination of drinking water sources is unacceptable.

- **PERL recommends** that all asphalt plants within below-the-water-table pits and quarries be terminated. This practice is unnecessary given alternative sitings available.

More and more new aggregate quarries are below-the-water-table, which forces the operator to pump and discharge billions of litres of groundwater to surface waters. These are important drinking water and natural heritage system sources of water. With a world continually losing more of its good quality water, we should not waste this life-giving resource for the sake of gravel.

- **PERL recommends** that new quarries be located away from good quality groundwater sources that are used by nearby populations, and away from key natural heritage system areas.

Imported fill for rehabilitation works greatly increases the risk of groundwater contamination, since there are no regulations on the control or screening of contaminants in the imported fill.

- **PERL recommends** a prohibition on the use of imported fill into pits and quarries, especially for below-the-water-table quarries, including the older quarries that no longer have fill available. These older quarries can use quarry shale and clay from their own quarries to build sidewall slopes.

A pit or quarry has unavoidable negative impacts on the local environment and its inhabitants. Quarries leave the landscape permanently altered, more and more often creating unnatural lakes. Furthermore, some aggregate operations cause noise, dust, blasting problems affecting adjacent neighbours and their properties. The negative effects of pits and quarries are primarily local.
• **PERL recommends** that local governments / agencies have a greater role in the management and enforcement of pit and quarry operations, in co-operation with the MNR and the Ministry of the Environment ("MOE"). This would supplement MNR and MOE resources.

The roles and responsibilities of the MNR and MOE are unclear to the public. Too often complaints get referred back and forth between the MNR and the MOE, leaving the complaint unresolved. The public does not know where to go. This is a serious issue.

• **PERL recommends** that the roles and responsibilities of the MNR, MOE, Conservation Authorities and Municipalities be re-defined as pertains to aggregate operations.

Finally, the confusion over roles and responsibilities of different government bodies extends to aggregate licencing in the Niagara Escarpment. The NEC and MNR frequently hold opposing opinions on aggregate licences, with the MNR working away to undermine the position of the NEC even during hearings before the Ontario Municipal Board and the Joint Board. Having a government agency and ministry at odds is utter nonsense, especially when the NEC is an agency of the MNR and is specifically tasked with commenting on applications which may affect the Niagara Escarpment. In the recent Joint Board hearing attended by PERL, MNR carried on secret negotiations with Nelson Aggregates Co. and accepted mitigation measures on a neighbouring property without telling the owner, PERL or the NEC. This conflict can be easily resolved.

• **PERL recommends** that in the case of the NEC, it should be removed from the MNR or given deference in land use planning decision.

PERL believes that the implementation of its above recommendations will strengthen the ARA. Thank you for accepting our comments for the much-needed review of the ARA. We are available to answer any questions of the Standing Committee on General Government on our submission.

Sincerely,

PERL
