



## **Concerned Residents Coalition Working to Protect Your Community and Environment**

2020-05-12

Resource Development Coordinator  
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Resource Development Section  
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Via email: [aggregates@ontario.ca](mailto:aggregates@ontario.ca)

### **Re: Proposed amendments to Ontario Regulation 244/97 and the Aggregate Resources of Ontario Provincial Standards under the Aggregate Resources Act, ERO number 019-1303**

#### **Context for our Comments**

The Concerned Residents Coalition (CRC) is the voice for approximately 1,500 residents of Guelph Eramosa Township and Halton Region who live in the vicinity of a proposed dolomite quarry located on the southern edge of the village of Rockwood. CRC was a party in opposition to an appeal submitted by James Dick Construction Limited (JDCL) in the case heard by the Local Planning Appeal Tribunal (LPAT) that culminated with the decision to grant the appellant's appeal (PL 170688) and approve amendments to the Township zoning bylaw and Wellington County official plan to permit aggregate extraction on a 100 acre parcel of land, identified by the proponent as the Hidden Quarry, previously zoned as agricultural/greenlands.

In addition to numerous technical arguments regarding negative impacts of the proposed quarry submitted in testimony by CRC and Halton Region, we hold the view that a number of overarching priorities must be addressed, including the following:

- The aggregate extraction industry in Ontario has long been in need of a rational, modern management strategy that takes supply, production capacity, and market demand into account;
- The industry's practice of moth-balling partially depleted pits and quarries only to open new sites that are closer to current markets should be replaced by a more efficient supply chain that enables producers to exhaust the supply at their sites, feed to market through strategically located inventory depots, and close and rehabilitate the sites, before moving on to new locations, thereby reducing the destructive proliferation of unneeded pits and quarries throughout the Province;
- We are not confident that the industry is able or willing to effectively self-regulate as a consequence of the lack of capacity and political will for enforcement by MNRF. We find it problematic that, as in the

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Hidden Quarry decision, the onus is placed on the operator to monitor operational impacts and address them scrupulously. We assert that this is a recipe for constant wrangling over access to and interpretation of data between the operator and the community, represented in the Hidden Quarry case by a prescribed Community Liaison Committee. We are also concerned that the annual compliance schedule and 90-day (after reporting) remedy allowance will not address the immediacy and danger of unpredicted negative impacts.

- We believe that water resource protection, especially in moraines, must take precedence over aggregate production as a Provincial priority in view of current and projected climate change impacts. It is significant that the Hidden Quarry is situated on the hydrologically important Paris Moraine, with functions that influence groundwater and surface water resources at both regional and local scales.

### **Proposed Changes to O.REG. 244/97**

We are in general agreement with the comments provided by **Gravel Watch Ontario** in its letter dated March 2020. However, we do wish to address the issue of flyrock risk in particular, as considered in Section 3.1.3 for new and existing operations.

It is important to understand that the risk associated with flyrock is **the product of the probability of ejection of flyrock from the quarry site times the consequences of such ejection should it occur**. The probability of “wild flyrock” leaving the site is low, but not zero, in spite of the best efforts of competent blasting contractors. However, the consequences of flyrock can be catastrophic, and therefore the associated risk cannot be ignored. The Ontario aggregate industry relies solely on the low probability of ejection to justify its practice of ignoring flyrock risk in blasting impact assessments. This has not prevented cases of damaging flyrock in Ontario.

In Ontario, Professional Engineers are required to sign off on blast impact assessments, and in practice have done so without considering flyrock risk, justified because the ARA does not specifically require this element of impact assessment. Professional Engineers are obliged by oath to protect the health and safety of citizens as an overarching responsibility in engineering works, and yet the profession has steadfastly refused to seek any professional standards regarding this issue.

Wild flyrock ejection is not predictable. The prevailing opinion of experts in the field is that it is not possible to reliably detect inconsistencies in subsurface structures such as fractures, voids and clay seams that provide pathways for the propagation of blasting energy and the ejection of flyrock as ballistic material. It is clear that the only protection against flyrock risk is the provision of sufficient setback between the blast site and receptors such as structures including residences, personnel and the public. Indeed, since the Ontario Ministry of Environment, Conservation and Parks regards the ejection of flyrock as prohibited, safe setback must be to the site perimeter.

Good practice in the aggregate extraction industry globally uses one of two models to determine safe setback, one established by the US Bureau of Mines (USBOM), and the other by Terrock Consulting Engineers (TCE) of Australia. Both models yield the same or similar setbacks for given situations.

Numerous jurisdictions internationally as well as within Canada (Nova Scotia for instance) set minimum requirements for blasting setback from buildings and personnel. Ontario does not.

## Conclusion

In conclusion, we support the spirit of the requirement being considered in Section 3.1.3: Implement measures to prevent fly rock from leaving the site during blast events if a sensitive receptor is within 500 metres of the boundary of the site.

However, we believe that there must be a higher degree of specificity in the requirements:

1. In view of the MOECP requirement that flyrock ejection from the site is prohibited, the setback must be to the site boundary;
2. 500 metres must be regarded as a minimum requirement;
3. Industry good practice for setback calculation, employing either the USBOM or TCE models, must be incorporated into Blast Impact Assessments for new site applications, and applied retroactively to existing operations.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Tripp". The signature is written in a cursive, somewhat stylized font.

Doug Tripp, P.Eng.  
President