

A primer on the aggregate mining industry

Submitted by Industry, Economic Development and Mines

Every year, millions of tonnes of aggregate mineral are mined from hundreds of pits and quarries across Manitoba. In fact, our local aggregate industry is the largest mining sector in the province, measured by both the volume produced and the land acreage disturbed.

Aggregate minerals are comprised of sorted sand, gravel and crushed stone material, valued largely for their strength when blended. It is primarily used either as an engineered soil base for stability or in the form of concrete or asphalt products. Virtually everything we build requires aggregate materials. It is used in and under our roads, highways, streets, sidewalks, airports, railways, parking lots, sewers, foundations and in the buildings themselves. Other uses include pre-cast concrete products, filtration in septic fields, backfill in underground mines, winter road sanding and armoring ‘rip-rap’ that prevents erosion on shorelines. In spite of technological strides over the last century, there are still no economically viable substitutes for aggregate minerals in our construction industry. Unlike other minerals, such as gold or diamonds, aggregate is a critical resource for infrastructure development in our province; as important as water and electricity.

Over 16 million tonnes of aggregate are consumed in Manitoba each year. Aggregate is characterized as a high bulk, low value commodity, and the cost of transportation frequently exceeds the in-situ value of the mineral itself. If there is no construction activity in an area, the local aggregate mineral deposits have no value. But if there is no local geologic source of aggregate minerals, the value of the closest deposit is directly proportionate to the distance the material must be trucked. The proximity of an aggregate source to a construction project or centre is a primary cost determinate.

Most RMs already have established gravel pits and/or quarries operating in their jurisdiction, and many are also fortunate to have undeveloped sources of mineral aggregate that

can be mined in future years. A fundamental principle of land use planning, supported by Provincial policy, encourages the conservation of this mineral resource to support future public and private infrastructure development. However, as both a land use and a use of land, pits and quarries can cause concerns that municipalities need to address.

Below are some of the commonly asked questions (and answers) about municipalities’ authority with respect to pits and quarries.

What about damage to roads used for hauling aggregate?

Regardless of whether the source of the aggregate is from private property or from a Crown pit or quarry, municipalities may, by by-law, collect a “maintenance, repair and restoration fee” and a “shortened lifetime of highway fee” based on the length of municipal road used and the number of tonnes hauled. The maximum fees are set out in MR48/97, *The Aggregate Mining and Transportation Fees and Agreements Regulation*, under *The Municipal Act*. The current combined maximum fee is \$0.026 per tonne per km. These fees were recently increased by 16% over four years in response to requests by the AMM and municipalities, and following a review by key stakeholders including the Province of Manitoba, the AMM, and the Manitoba Heavy Construction Association.

These fees can be applied even if the pit or quarry is in the adjoining municipality. Alternatively, in lieu of the fee, the Regulation authorizes municipalities to enter into agreements with pit and quarry operators whereby they are obliged to maintain the roads used to haul aggregate minerals.

Can municipalities tax aggregates?

While the Province retains exclusive authority to collect royalties and taxes on minerals resources, there is also provision under MR48/97, *The Aggregate Mining and Transportation Fees and Agreements Regulation* of *The Municipal Act*, authorizing municipalities to license and collect

fees based on annual aggregate production from pits and quarries on private land. The maximum annual fee allowed is currently \$0.044 per tonne. At the request of AMM, the Province has committed to a review of these fees. The AMM will be participating in this review.

Note that these fees cannot be charged where such mine operations are located on Crown land. All mineral extraction on Crown Land is subject to dispositions under *The Mines & Minerals Act* and to provincially established royalty rates, rental charges and fees.

Are pits and quarries subject to municipal zoning restrictions?

Yes. Certain environmental operating standards are imposed on pit and quarry operations by a regulation under *The Mines & Minerals Act (M65/92 The Quarry Minerals Regulation)*, and these apply across the province. However, municipalities may apply additional or more stringent requirements tailored to specific local conditions under zoning bylaws passed in accordance with *The Planning Act*. Bylaws governing hours of operation and truck routes can also be passed under *The Municipal Act*.

What about rehabilitation of pits and quarries?

Each year since 1992, the Province has collected from all pit and quarry operators a rehabilitation levy of \$0.10 per tonne of aggregate produced. This money goes into a dedicated fund. Once extraction of the economically valuable aggregate mineral is complete, the property owner may apply to have the pit or quarry rehabilitated to provincial standards, and such work is paid for from this fund. Progressive rehabilitation is encouraged. This ongoing program ensures that post mining landscapes will be rehabilitated to a safe, environmentally stable and productive state. Since 1992, over 1,500 rehabilitation projects have been undertaken, restoring more than 6,570 hectares (16,200 acres) of depleted lands, at a cost of just over \$16 million. §

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