

The ECO also urges MOE to develop a comprehensive plan to update the requirements/standards applied to aging, active landfill sites, both large and small, approved prior to August of 1998. This could be achieved by following through on the objective outlined in the Protocol for Updating Waste Management Certificates of Approval – by developing and implementing a comprehensive plan to revisit and update the Cs of A for these sites in order to incorporate, to the extent possible, the newer landfill standards. This would help MOE to shift to a more proactive approach for updating landfill requirements, rather than relying on triggers such as proponent applications for site modifications.

(For ministry comments, see page(s) 213.)

Recommendation 3

The ECO recommends that MOE update and enhance its landfill inventory and make it accessible to the public.

Ontario's Sand and Gravel Extraction Policy: Overdue for Review

In 1994, Ontario began a long period of rapid growth, consuming vast quantities of sand and gravel each year to build highways, roads, high-rises, subdivisions and other infrastructure. Our total consumption of sand, gravel and rock (collectively called aggregates) amounts to approximately 173 million tonnes per year – an astonishing 14 tonnes per person, per year. To meet this need, we have thousands of pits and quarries, especially close to southern Ontario's areas of intensive growth.

Aggregates are very heavy, but low-cost materials, so trucking costs are significant, and create pressure to extract aggregates as close to markets as possible. Since aggregates are a key ingredient for building public infrastructure, the provincial government also has a longstanding policy of encouraging aggregate extraction as close to markets as possible. As a general rule, municipal councils must give the aggregate industry access to local deposits of aggregate, regardless of local need for aggregate, or concern from local residents. Municipalities can find this situation frustrating, since they have very limited powers to deal with day-to-day compliance problems, yet must accept aggregate sites.

Ontario's geology dictates where the best deposits of high-quality aggregate can be found: the Niagara Escarpment, the Oak Ridges Moraine and the Carden Plain are all excellent sources for many specialty aggregate products. However, as the ECO has noted

in past annual reports, these are also regions with significant natural heritage, providing unique habitats and remnant green corridors in a landscape that is otherwise rapidly urbanizing. Aggregate operations remove virtually all vegetation, topsoil and subsoil to reach the sand, gravel or bedrock beneath. By necessity, extraction also removes all natural habitat, disrupts pre-existing stream flows, changes final grades on the land, and alters drainage patterns. While on the one hand, municipalities are directed by the Provincial Policy Statement to provide access to aggregates, the very same document also directs them to maintain “linkages and related functions among surface water features, ground water features, hydrologic functions and natural heritage features and areas.” So the siting or expansion of pits and quarries in southern Ontario is becoming increasingly controversial.

Pits and quarries are regulated by the Ministry of Natural Resources, under the authority of the *Aggregate Resources Act (ARA)*. MNR issues site-specific approvals to operators through licenses (on private lands) and permits (on Crown lands). A key part of the approval process is the drafting of a site plan by the operator. In approving the site plan, MNR sets out conditions on how operations at the sites are to be carried out, such as the allowable depth of excavation, allowable hours of operation, constraints on noise, locations of visual screens such as tree plantings or berms, and any required protection of wetlands, woodlots or other natural heritage areas.

The ECO has warned repeatedly in past annual reports that the environment is not adequately protected by the existing regulatory and policy framework for pits and quarries. Key shortcomings include erratic compliance, poor enforcement, unacceptably low rates of rehabilitation of disturbed lands, and a policy vacuum on resource conservation. As well, in northern Ontario, the *ARA* does not apply to most pits and quarries on private lands, so these operations have fewer environmental rules.



Weak compliance system and poor enforcement

Following regulatory reforms in the late 1990s, aggregate operators became responsible for assessing their own compliance with site plans, while MNR committed to field auditing 20 per cent of sites each year. But this arrangement has many weaknesses. MNR's own evaluation in 2002 found that some industry operators were submitting reports deficient in important information such as excavation depth or rehabilitation

information (see the 2003/2004 ECO annual report, page 62). MNR began to target operators who submitted late or poor quality reports in 2002/2003. Due to a shortage of inspectors, MNR has never been able to meet its own target of field-auditing 20 per cent of sites; actual field audit rates hovered between 10 and 14 per cent between 2002-2004. This means that some sites are operating without independent site audits for seven years or longer, with increased risks that past or ongoing contraventions of the *ARA* are not detected or prosecuted. In 2005, MNR hired three additional inspectors, but it is doubtful that this will resolve all the problems. The ECO continues to hear complaints about aggregate operations from members of the public.

No regulations for northern pits and quarries on private lands

The *ARA* applies to Crown land throughout the province and to most private lands in southern Ontario. However, most private lands in northern Ontario are not designated under the *ARA*, so operators on such lands do not require approvals from MNR, and are not bound by the ministry's requirements for site plans, compliance reports, or site rehabilitation. Instead, such operations receive their approval (at a reduced level of scrutiny) from the local municipality, if there is one established.

In 1998, two applicants used their *EBR* review rights to highlight this problem, complaining that unregulated aggregate extraction in their northern Ontario municipality was causing environmental harm, including damage to neighbouring properties, erosion, the destruction of fish habitat and unremediated gravel pits. They asked that geographical coverage of the *ARA* be extended to their township to provide improved scrutiny. MNR turned down the request, but stated that "all significant aggregate resource areas of Ontario should be designated," and that new areas would be designated sequentially by region. However, MNR has not made much progress on this commitment since 1998, citing lack of resources.

This issue made the news in 2004, with the proposal to open a quarry on the north shore of Lake Superior in Michipicoten Harbour – an area of Ontario known for its natural beauty, but not subject to the rules of the *ARA* (see the ECO's 2004/2005 report, pages 89-91). In response to public concerns, MNR designated the quarry property, the Township of Michipicoten, and nearby lands under the *ARA*.

Poor rehabilitation rates

The *ARA* requires operators to rehabilitate pits and quarries to the satisfaction of MNR. The Act requires both "progressive" and "final" rehabilitation, meaning step-wise rehabilitation during extraction, and restoration of land either to its former use or

changed to another compatible use. There are also additional, stronger rehabilitation requirements for specially designated areas of the province, under the Niagara Escarpment Plan, the Oak Ridges Moraine Conservation Plan and the Greenbelt Plan. Unfortunately, these rehabilitation requirements are not being complied with by all operators, and many worked-out sites are being left in a disturbed state. MNR data indicate that over the past decade, an annual average of 1,056 hectares is newly disturbed by aggregate operations, while, on average, only 461 hectares are rehabilitated annually. Although these poor rehabilitation rates are an acknowledged concern for MNR, it does not appear that the ministry laid any charges for failures to rehabilitate sites during the six-year period between 2000-2005 (see also pages 141-145).

No policy to conserve aggregates

Assuming that Ontario's current population growth rates continue, and that our per capita use of aggregate remains steady, Ontario's demand for aggregate will continue to grow – perhaps by two million tonnes per year. Ontario's voracious appetite for sand and gravel has serious environmental consequences, especially combined with an explicit policy to encourage extraction as close to population centres as possible. The consequences include steadily increasing pressure to dig up southern Ontario's remnant areas of farmlands, natural heritage and greenspace. There are also disruptions for local streams and groundwater, conflicts about noise, dust, blasting impacts, interference with private wells and complaints about truck traffic.



The ECO first drew attention to the need to conserve aggregate in our 2002/2003 annual report, and suggested an increased focus on aggregate recycling opportunities, as well as a rethinking of aggregate specifications and design standards for highways, urban streets and subdivisions. For example, certain modest reductions in standards for pavement width might help reduce urban sprawl, improve stormwater infiltration, and also conserve aggregate. The ECO recommended that MNR and the Ministry of Transportation collaborate on a strategy for conserving Ontario's aggregate resources. In response, MNR did establish an inter-ministerial committee with this focus – the Aggregate Resources Conservation Strategy Committee. But the committee does not appear to have made much progress over the past two years. (See The ECO's Round Table on Aggregates, page 42.)

The ECO's Round Table on Aggregates

The Environmental Commissioner of Ontario hosted a one-day meeting – *Aggregates Round Table: Toward a Long-Term Aggregate Strategy for Ontario* – on January 26, 2006. The Round Table allowed key stakeholders to discuss the need for, and possible components of, a long-term aggregate strategy for Ontario. The ECO wanted to focus the day's dialogue on a longer-term vision for the year 2020 and beyond, and to steer discussion away from debates about day-to-day approvals, compliance and enforcement issues.

The Round Table brought together over 30 stakeholders, representing a broad range of organizations involved in the aggregate sector, including industry, provincial and municipal government, and non-government organizations. The meeting was not intended to resolve long-standing issues, but rather to identify areas of common ground, as well as areas requiring further discussion. Over the course of the day, participants discussed:

- the need for aggregates
- challenges for close-to-market aggregate sources
- the need for an accurate, current inventory of reserves and consumption trends
- the potential for conservation of aggregates
- opportunities for alternate sources of aggregates
- options for transportation of aggregates ways forward.

Participants found a reasonable level of agreement on the following issues:

- The need for better up-to-date information on aggregate reserves and consumption trends, for agencies and the public.
- The value of examining design standards for roads, highways and other infrastructure to identify options to conserve aggregates.
- The need to increase licence fees and royalties to encourage conservation and to fund government oversight.
- The value of designating all of Ontario under the *Aggregate Resources Act*.
- The value of all parties working together toward a long-term strategy for aggregates by 2008.

The summary report for the Round Table is available on the ECO's Web site www.eco.on.ca

Concerns raised through *EBR* applications

A number of Ontario public interest groups and individuals have tried over the past three years to use the *EBR* as a catalyst for reforms. Unfortunately, in a disturbing pattern, their applications under the *EBR* have been either stalled or dismissed by MNR.

- In November 2003, a citizen's group called Gravel Watch used the *EBR* to request a review of sections of the *ARA* dealing with rehabilitation requirements. The group pointed to the aggregate industry's poor record on rehabilitating old pits and quarries, requesting a review of s. 6.1 of the *ARA*, which sets out rules for an Aggregate Resources Trust. This trust oversees the spending of funds (collected on behalf of the public) on rehabilitation work, but the citizen's group argued that responsibility for the Trust has been inappropriately assigned to the aggregate industry itself,

without adequate public accountability. MNR agreed to undertake this review in January 2004, but continued to deliberate behind closed doors for well over two years, and did not release the outcome of its review until August 2, 2006, as this annual report was going to press. The ECO will review the outcome of this application in the 2006/2007 annual report.

- In January 2005, two environmental organizations (the Pembina Institute and Ontario Nature) jointly submitted a wide-ranging *EBR* application for review, requesting reforms of many aspects of Ontario's policy for aggregate resources (see pages 141-145). The applicants described their concerns about rehabilitation requirements, an outdated fee structure, and other issues. MNR turned down this request, arguing that those concerns within MNR's mandate were already being considered under two separate initiatives: 1) the still ongoing review of the Gravel Watch application, and 2) the ongoing internal discussions within the Aggregate Resources Conservation Strategy Committee.
- In November 2005, two applicants requested a review of the geographic extent of the *ARA*, arguing that all of Ontario ought to be designated under the *ARA* (see the Supplement to this report, pages 225-229). MNR also turned down this request, and as a rationale, again pointed to the two internal initiatives still under way – the Gravel Watch review and the inter-ministerial committee on aggregate conservation. However, neither of these two ongoing internal reviews had been focusing on the the question of *ARA* coverage in northern Ontario; indeed, the Gravel Watch group had not even raised *ARA* coverage as a problem.

The ECO is troubled by MNR's rationale for turning down the last two applications. Under the *EBR*, ministers do have discretion to turn down applications, and may consider whether similar reviews are already under way. But the ECO is very concerned that these separate initiatives have been under way since 2003/2004, without any indications of progress and without any opportunity for public participation. Both the lengthy delays and the lack of transparency associated with these internal reviews run counter to the intentions of the *EBR*. The *EBR* requires ministers to conduct reviews "within a reasonable time," and also suggests that ministers consider the adequacy of public participation in policy development.

These recent *EBR* applications demonstrate a growing public concern with the inadequacies of the regulatory framework for aggregate resources, and the unreadiness of the ministry to show leadership on this issue. Another indication of public frustration is the level and broad scope of commentary that MNR received on the recently finalized Policies and Procedures Manual for the Administration of the *Aggregate Resources Act*. The ECO plans to review this ministry decision in our 2006/2007 annual report.

It is now well past time for MNR to engage the full range of stakeholders in an open discussion of the challenges and the options for policy reform. The environmental problems with aggregate extraction have been abundantly documented. The need for stronger environmental protection is clear. Measures for reform include more credible mechanisms for compliance, inspection and enforcement; rehabilitation rates that meet existing legal requirements; and a strategy of effective resource conservation measures. They should also include covering northern Ontario under the *ARA*; an updated fee structure to encourage conservation and to pay for rehabilitation; and transparency and a stronger voice for municipalities and the public.

The ECO urges the Ministry of Natural Resources to give this area of its mandate a high priority in the coming year.

(For ministry comments, see page(s) 213.)

A Sustainable Transportation System for Ontario: MOE and MTO Remove One Roadblock, But Others Remain

Ontario's transportation sector has a substantial impact on the province's natural environment. The road network, including its demands for aggregates and salt, leaves a major footprint on the landscape, resulting in altered and degraded waterways and fragmented ecosystems. Vehicles on the road network contribute about a quarter of all greenhouse gases emitted in the province and a large amount of the emissions that lead to smog. Ontario's transportation system has been evolving in this unsustainable direction for decades, and yet the big decisions on transportation remain largely screened from public debate. The ECO feels that these points cannot be separated: the transportation network will not become more sustainable without more openness and public input in decision-making.

It's also clear that many Ontarians would like to see the transportation network become more environmentally sustainable. For example, two separate *EBR* applications were filed with the Environmental Commissioner of Ontario, one in 2003 and the other in 2004, requesting that the Ministry of Transportation become subject to more review under the *EBR* (see also pages 132-134). The ECO welcomes the response of the Ministry of the Environment on this issue – MOE has told the ECO that the ministry is planning to revise its *EBR* regulation to make MTO subject to *EBR* reviews.

The ECO has been pointing out for some time the need for greater public scrutiny of MTO decision-making. The ECO's 2000/2001 annual report highlighted the poor