Provincial Infrastructure Planning: Aggregates and Energy
(Between Rocks & Other Hard Places)

Recent Trends and Issues In Aggregate Approvals

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INTRODUCTION

Local disputes over aggregate development are nothing new. Recently, however, those traditionally local disputes have made it to the forefront of the broader public consciousness. Provincial actions, such as the Minister's zoning order to prohibit St. Mary's proposed quarry in Flamborough and the Provincial Liberals' campaign promise to undertake a review of the *Aggregate Resources Act*, reflect a political awareness that aggregate development is attracting attention outside of special interest groups and industry stakeholders. While the recent quarry proposed in Melancthon Township has proved a lighting rod for public attention and scrutiny, it has also raised apprehensions among the public that the existing regulatory system is not sufficiently robust.

In September 2011, shortly before the most recent Provincial election, the Liberal Government announced that it would require the Highland Companies' proposed Melancthon quarry to proceed through a full environmental assessment pursuant to the *Environmental Assessment Act*. Unfortunately, the Ministry of the Environment press release suggested that potential environmental impacts of the Highland Companies' proposal would not be appropriately evaluated unless an environmental assessment is undertaken.[1] However, the Minister's press release appears to base its decision to require an environmental assessment on the "unique nature of the Melancthon quarry proposal." The Minister's decision should not suggest that the existing regulatory regime for aggregate proposals is inadequate. The existing regulatory regime for the establishment and operation of a pit or quarry in Ontario is capable of providing a meaningful assessment of the potential environmental impacts.

The first part of this paper will provide an overview of the statutory and policy framework applicable to aggregate operations on private land, focusing on the process of establishing a new aggregate operation. The second part of this paper will review recent issues in aggregate cases. Both sections will focus on the regulation of environmental impacts. The focus of this paper is on the establishment of new or expanded aggregate operations on private land.

WHAT ARE AGGREGATES

In general terms, aggregate operations are mining operations. However, the material being mined is "aggregate" rather than metallic ores such as gold or silver. Specifically, aggregates are "*gravel, sand, clay, earth, shale, stone, limestone, dolostone, sandstone, marble, granite, and rock*", but not *metallic ores, asbestos, graphite, kyanite, mica, nepheline syenite, talc,*

[1] Ministry of Environment Press Release. http://news.ontario.ca/ene/en/2011/09/statement-from-minister-of-the-environment-john-wilkinson-regarding-highland-companies-proposed-quar.html. Accessed January 2012.

wollastonite [2] *or andalusite, barite, coal, diamond, gypsum, kaolin, lepidolite, magnesite, petalite, phosphate rock, salt, sillimanite and spodumene*[3].

For the past 20 years aggregate consumption in Ontario has averaged 164 million tonnes per year, and is projected to increase to 186 million tonnes per year for the next 20 years.[4] Although over 80% of aggregates are consumed by the construction industry, nearly 20% of all aggregates are consumed for other uses such as agricultural fertilizers and soil supplements, carpets, catalytic converters, automobile parts, light bulbs, metal casting, pharmaceuticals, photovoltiacs, septic systems, streetcar brake systems, sugar refineries, tooth paste, TV & computer screens, and wind turbines.[5] Road construction constitutes the largest consumer of aggregates, followed by new residential construction.[6] Examples of typical aggregate consumption activities are:[7]

- 9 tonnes per underground parking space
- 85 tonnes for a rural septic bed
- 250 tonnes for a 185 sq. m. (2,000 sq. ft.) house
- 730 tonnes for a 1,000 sq. m office building, school or hospital
- 1000 tonnes per km of water pipe that is under a boulevard
- 4,500 tonnes per km of water pipe that is under a road
- 14,500 tonnes per km of sewer line under a road
- 4,000 tonnes for a wind turbine
- 6,000 tonnes per km of railway bed
- 18,000 tonnes per km of 2 lane highway

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[2] *Aggregate Resources Act*, section 1(1); definition of "Aggregate" and "Rock";. *Provincial Policy Statement, 2005*, Definition of "*Mineral Aggregate Resource*".

[3] *O. Reg. 244/97 - General, section 7.1*

[4] *State of the Aggregate Resource in Ontario Study Paper 1 - Aggregate Consumption and Demand, Executive Summary* ["Saros Paper 1"], page ii

[5] Saros Paper 1, page 28

[6] Saros Paper 1, page 30

[7] Saros Paper 1, page 34

- 44,000 tonnes per km of 4 lane freeway
- 114,000 tonnes per km of subway line

As public authorities are the largest consumers of aggregate, policy decisions regarding the establishment and operation of aggregate operations may have a direct financial impact on public authorities who purchase aggregates.

AGGREGATE OPERATIONS

There are two basic types of aggregate operations, "pits" and "quarries". The distinction relates to the type of aggregate being mined. Pits mine unconsolidated bedrock, such as stone, sand, and gravel, while quarries mine consolidated bedrock, such shale, limestone, dolostone.[8]

While both are aggregate operations, the difference between pits and quarries is significant and has a direct bearing on operational requirements and potential environmental impacts. Important differences relate to matters such as:

1. Blasting - Quarries require blasting to dislodge material form the working face; whereas at pits the material can be removed by a front end loader without blasting.

2. Processing equipment - Quarries require crushing machines on a full time basis to break down the material into smaller pieces; whereas pits can operate without a crusher or with a crusher only part time.

3. Water management operations when working below the water table - Quarries require the excavation area to remain dry; whereas at a pit it is possible to extract material from below the water table using machinery located in a dry area above the water table.

Ultimately, all aggregate operations have the potential for significant environmental impacts, since they require the removal of all vegetation and soil in the extraction area and have the potential to impact ground and surface water flow. Accordingly, each aggregate operation requires appropriate studies to address the particular circumstances of that proposal.

THE STATUTORY FRAMEWORK

Aggregate operations are subject to a myriad of statutory and policy provisions governing both their establishment, their overall operation, and discrete operational aspects (e.g. water taking and discharge, fuel storage, or blasting).

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[8] *Aggregate Resources Act*, section 1(1); definition of "pit" and "quarry".

In terms of establishing a pit or quarry both *Planning Act* and *Aggregate Resources Act* approvals are typically required as few sites are pre-zoned for aggregate extraction and no sites are "pre-licenced" under the *Aggregate Resources Act*.

Planning Act

The establishment and operation of a pit or quarry is a land use, and as such requires approval pursuant to the *Planning Act*:

> *34.(1) Zoning by-laws may be passed by the councils of local municipalities:*
>
> *Restricting use of land*
>
> *1. For prohibiting the use of land, for or except for such purposes as may be set out in the by-law within the municipality or within any defined area or areas or abutting on any defined highway or part of a highway.*
>
> *34(2) The making, establishment or operation of a pit or quarry shall be deemed to be a use of land for the purposes of paragraph 1 of subsection (1)*

One of the matters that will be adjudicated in the (near) future, and which will not be a focus of this paper, is the interplay between the *Planning Act* and the *Aggregate Resources Act,* and the limits of municipal by-laws in regulating aggregate operations. While section 12.1(1) of the *Aggregate Resources Act* requires zoning permission as a precondition to the granting of a new *Aggregate Resources Act* licence, section 66 of the *Aggregate Resources Act* limits the operation of by-laws and many other municipal means of regulating aggregate operations.

> *66.(1) This Act, the regulations and the provisions of licences and site plans apply despite any municipal by-law, official plan or development agreement and, to the extent that a municipal by-law, official plan or development agreement deals with the same subject-matter as this Act, the regulations or the provisions of a licence or site plan, the by-law, official plan or development agreement is inoperative.* [emphasis added]

The *Aggregate Resources Act* further limits the application of the *Planning Act* by precluding the application of a development permit issued under the *Planning Act* to *Aggregate Resources Act* licenced sites.

> *66(5) A requirement for a development permit imposed by a development permit system established under subsection 70.2 (1) of the Planning Act does not apply to a site for which a licence or permit has been issued under this Act.*

Notwithstanding the *Aggregate Resources Act* provisions, there should be no dispute that the *Planning Act* is a fundamental tool for regulating the location and establishment of licenced

aggregate operations. This is particularly so in areas of Ontario where there is no requirement to obtain an *Aggregate Resources Act* licence[9], and only *Planning Act* permission is required in order to establish a new aggregate operation.

By virtue of the need for *Planning Act* approval, and the complete application requirements established by Bill 51, municipalities can (and do) demand that a wide range of studies be undertaken when considering an application to establish a new or expanded pit or quarry.

Aggregate Resources Act, 1990

There are four statutorily established purposes for the *Aggregate Resources Act*. When read in conjunction with the applicable definitions, those purposes are to:[10]

- provide for the identification, orderly development and protection of the aggregate resources of Ontario.
- control and regulate aggregate operations on Crown and private lands, where operate means "work" and includes all activities associated with a pit or quarry that are carried out on the site.
- require the land from which aggregate has been excavated to be treated so that the use or condition of the land is:
    - restored to its former use or condition, or
    - is changed to another use or condition that is or will be compatible with the use of adjacent land.
- minimize adverse impact of aggregate operations on the air, land and water, or any combination or part thereof of the Province of Ontario.

The *Aggregate Resources Act* is administered by the Ministry of Natural Resources, and applies to all Crown land and any private land that is designated as being subject to the *Aggregate Resources Act*.[11] Designated areas are identified in Ontario Regulation 244/97, as amended, and include all of Ontario south of Sault Ste Marie/Sudbury/ North Bay, areas around Wawa, and areas around Thunder Bay.

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[9] *O. Reg. 244/97,* section 6, identifies those areas of the Province where *Aggregate Resources Act* permission is required in order to establish a pit or quarry on privately owned land.

[10] *Aggregate Resources Act,* sections 2 and 1(1) definition of "management", "operate", "rehabilitate", "environment"

[11] *Aggregate Resources Act,* sections 3(1) and 5(1)

The majority of Northern Ontario has not been designated under the *Aggregate Resources Act*. In those areas of Northern Ontario that have not been designated, approval is not required to establish a new pit or quarry on private land. As such, in those areas, land use approvals pursuant to the *Planning Act* are paramount when considering the establishment of a new pit or quarry on private land.

To fulfill its mandate under the *Aggregate Resources Act*, the Ministry of Natural Resources has the ability to initiate a broad range of studies and research regarding the aggregate industry, environmental and social matters related to aggregate industry, and to consult with municipalities and Ministries, and advise on planning matters related to the aggregates.[12]

Categories of Aggregate Licences and Permits

The *Aggregate Resources Act* sets out three types of licences and permits depending upon the type, purpose, and location of the aggregate operation. Within these three categories there are a total of 15 different categories of licences and permits. The three main categories are:

- "Licences" to operate a pit or quarry on private land in an area designated under the *Aggregate Resources Act*.[13]

- "Wayside Permits" to operate a wayside pit or wayside quarry on private land in an area designated under the *Aggregate Resources Act*.[14] A wayside pit / quarry is an operation that supplies aggregate to a specific road construction or road maintenance project. A wayside permit can only be obtained by the public authority undertaking the project or the person who has the contract with the public authority.

- "Aggregate Permits" to operate a pit or quarry on Crown land.[15]

Licences are further divided based on whether the maximum annual volume of material that can be removed from the operation is greater than 20,000 tonnes annually. In the result, there are 8 different categories of licences depending on whether the operation (i) is a pit or quarry, (ii) above or below the established water table, and (iii) produces more or less than 20,000 tonnes annually.

There are 6 categories of aggregate permits, four of which depend upon whether the operation is (i) a pit or quarry, and (ii) above or below the water table. The 5th and 6th categories of aggregate

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[12] *Aggregate Resources Act*, section 3(2)

[13] *Aggregate Resources Act,* Part II

[14] *Aggregate Resources Act*, Part III

[15] *Aggregate Resources Act*, Part V

permits relate to the special cases of land underwater and the forestry industry (access road construction). There is only one category of wayside permit for all wayside operations regardless of whether it is a pit or quarry or it is to be above or below water table.

Wayside permits and aggregate permits have been identified for information only. The focus of this paper is on operations requiring a licence under the *Aggregate Resources Act* and not on operations requiring a wayside permit or aggregate permit.

Application and Processing Requirements

Section 7 of Ontario Regulation 244/97, as amended, provides that all applications for and the operation of pits and quarries "*shall be in accordance with "Aggregate Resources of Ontario: Provincial Standards, Version 1.0" published by the Ministry of Natural Resources*".

The Provincial Standards were published in June 1997. For each of the 15 categories of authorizations under the *Aggregate Resources Act*, the Provincial Standards prescribe requirements for:

- site plans
- technical reports
- minimum licence conditions
- notification and consultation requirements for applications
- operational standards, and
- annual compliance reporting.

While many aspects of the Provincial Standards are identical or similar, each of the 15 categories has its own particular requirements.

Similar to the *Planning Act,* the Provincial Standards require the Ministry of Natural Resources to determine that the application is complete before the application process can proceed. Technical report requirements are indentified in respect of matters addressed in the *Provincial Policy Statement*, including planning and land use, agricultural land classification, adverse effects on ground and surface water resources, negative impacts on the natural heritage features identified in the *Provincial Policy Statement* as being "significant", and cultural / archaeological heritage resources. The Provincial Standards also require noise assessments and blasting design reports to be prepared in certain circumstances. Finally, both the *Aggregate Resources Act* and

the Provincial Standards reserve to the Ministry of Natural Resources the ability to require additional information or to refuse to further consider an application. [16]

While the *Planning Act* was only recently amended to allow municipalities to require these kinds of technical studies prior to the consideration of a planning application, the Provincial Standards have always required detailed technical studies to be undertaken. Similarly, provincial guidance as to what off-site environmental features (adjacent lands) need to be indentified and studied is now consistent with the Provincial Standards, which require all features within 120 metres of a site to be identified and studied.[17] Prior to the release of the *Natural Heritage Reference Manual* for the 2005 *Provincial Policy Statement* which established a consistent distance of 120 metres for adjacent lands,[18] the provincial guidance with respect to adjacent land study requirements varied depending upon the feature in question, being as little of 50 metres in some instances.[19]

All of this is to illustrate that the tools to ensure that a detailed evaluation of aggregate proposals, including the assessment of potential environmental impacts, are provided for within the existing regulatory framework.

Circulation and Public Consultation

Unlike *Planning Act* applications where the municipality is responsible for circulating the application materials, obtaining comments, coordinating responses, and arranging public meetings, the *Aggregate Resources Act* application process is proponent driven. For all *Aggregate Resources Act* applications,[20] the Provincial Standards prescribe a notification and public consultation process that the proponent must complete. For licences, sections 11(1) to 11(4) of the *Aggregate Resources Act* set out the basic requirements of notification and consultation, and the Provincial Standards provide the details of that procedure including timelines. The procedure requires the items set out below.

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[16] *Aggregate Resources Ac, sections*. 7(5), 23(5), and 36(2).

[17] Provincial Standards, see Report Standards for Level 1 and 2 Natural Environment Reports for each of the 15 categories of *Aggregate Resources Act* authorizations.

[18] *Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005*, Ministry of Natural Resources, May 18, 2010. See Table 4-2 on page 42. The only exception to the 120m adjacent lands standard is with respect to earth science ANSIs, for which the adjacent land distance is 50m.

[19] *Natural Heritage Reference Manual for Policy 2.3 of the Provincial Policy Statement*, Ministry of Natural Resources, June 1999. See page 13 for adjacent lands to significant portions of the habitat of endangered or threatened species, page 23 for adjacent lands to significant woodlands, page 25 for adjacent lands to significant valleylands, and page 30 for adjacent lands to significant wildlife habitat

[20] Not including Aggregate Permits for the Forestry Industry

1. Once the Ministry of Natural Resources determines that the application is complete, the applicant can begin the notification and consultation process.

2. There is a 45 day notification period which requires the proponent to circulate the complete application to identified ministries and agencies, notify nearby landowners by registered mail, post a sign on the site, and publish specified information in a local newspaper.

3. The proponent must host an information meeting between day 21 and day 35 of the 45 day notification period.

4. During the 45 day notification period people or agencies must inform the proponent or the Ministry of Natural Resources if they object to the proposal.

5. If there are no objections received during the 45 day notification period, the proponent provides the Ministry of Natural Resources with documentation that the notification and consultation has been completed. The Ministry of Natural Resources then proceeds to make a recommendation regarding the issuance of the licence to the Minister.

6. If there are objections, the proponent is required to work with the objectors to resolve their objections. If the objections are resolved, the proponent makes any necessary revisions to the proposal, obtains a written confirmation that the objection is withdrawn, and submits the required documentation to the Ministry of Natural Resources indicating that the notification and consultation has been completed. The Ministry of Natural Resources then proceeds to make a recommendation regarding the issuance of the licence to the Minister.

7. If the objections are not resolved, the proponent submits documentation to the Minister and the remaining objectors detailing the proponent's efforts to resolve the objections and the proponent's recommendation for resolving the objections.

8. The remaining objectors then have 20 days from receiving that information from the proponent to submit their own recommendations for resolving their objections. If an objector does not provide its recommendation within 20 days, it is deemed that the objector no longer has an objection.

9. After the end of that 20 day period, the proponent provides the Ministry of Natural Resources with documentation indicating that the notification and consultation have been completed, including the efforts to resolve objections. Following the receipt of all information, the Ministry of Natural Resources has 30 days to make a recommendation to the Minister regarding the issuance of the licence.

10. The proponent has 2 years from the commencement of the 45 day notification period to provide the Minister with documentation that the notification and consultation has been

completed, including the efforts to resolve objections. If the proponent does not meet that deadline, the application is returned.

Though highly prescriptive, the *Aggregate Resources Act* process ensures that both proponents and objectors attempt to resolve objections.

Approval Considerations

When deciding whether to issue a licence, the Ontario Municipal Board has indicated that the purpose of the *Aggregate Resources Act* to "to minimize adverse impacts" on the environment is a test that must be addressed.[21]

In addition, section 12(1) of the *Aggregate Resources Act* enumerates considerations that the Minister, or the Ontario Municipal Board, must have regard to when deciding whether or not to issue a licence:

- the effect of the operation of the pit or quarry on the environment;
- the effect of the operation of the pit or quarry on nearby communities;
- any comments provided by a municipality in which the site is located;
- the suitability of the progressive rehabilitation and final rehabilitation plans for the site;
- any possible effects on ground and surface water resources;
- any possible effects of the operation of the pit or quarry on agricultural resources;
- any planning and land use considerations;
- the main haulage routes and proposed truck traffic to and from the site;
- the quality and quantity of the aggregate on the site;
- such other matters as are considered appropriate

Regard shall also be had to a proponent's history of compliance with the *Aggregate Resources Act* and previous licences (if any). However, if the previous contravention has been corrected in

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[21] *Jennison Construction Ltd. v. Ashfield-Colborne-Wawanosh (Town)*, OMB Case No.: PL101197 decision issued 16 December 2011, 2011 CarswellOnt 14129, para 136 ["*Jennison Construction*"].

See also *Drain Bros. Excavating Ltd. v. Havelock-Belmont-Methuen (Township)*. [2009] O.M.B.D. No. 616, 45 C.E.L.R. (3d) 80, para 89

accordance with the requirements of the *Aggregate Resources Act*, no regard shall be had to those past contraventions.[22]

Given the overlap between the subject mater of subsection 12(1) and subject matter of the *Provincial Policy Statement* and municipal official plans, it has been observed that a proposal which satisfactorily addresses the planning and land use tests in the planning instruments, will also satisfy the tests in section 12 of the *Aggregate Resources Act*.[23]

The Ontario Municipal Board

Under the *Aggregate Resources Act* there are three situations where the Ontario Municipal Board's adjudicative services may be called upon:

- the Minister refers the licence application and any objections to the Board, or the Minister Refuses the application and then applicant may require a hearing before the Board,[24]

- the Minister seeks to add, vary or rescind a licence condition or modify the site plan, then the licensee may require a hearing before the Board,[25] or

- the Minister seeks to revoke the *Aggregate Resources Act* licence, then the licensee may require a hearing before the Board.[26]

A proponent has no ability to require that its licence application be referred to the Board. Similarly, if the licencee requests that the site plan or licence conditions be amended and the Minister refuses, the licencee has no ability to compel that decision referred to the Board.[27]

Regulation / Enforcement

In addition to the licence and licence conditions, a site plan must be approved for every aggregate operation, and the operator is required to operate in accordance with that site plan.[28]

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[22] *Aggregate Resources Act*, sections 12(1), (2)

[23] *Jennison Construction*, para 139

[24] *Aggregate Resources Act*, sections 11(5), 11(11)

[25] *Aggregate Resources Act*, sections 13(6), 16(8)

[26] *Aggregate Resources Act*, sections 20(4)

[27] *Aggregate Resources Act*, sections 13, 16

[28] *Aggregate Resources Act*, sections 8, 15

While the *Aggregate Resources Act* and regulations establish general requirements for operations, either as a whole or by category of licence, the *Aggregate Resources Act* site plans and licence provide a mechanism to effectively regulate individual operations by establishing site specific requirements.

As discussed previously, the Provincial Standards establish prescribed conditions for each category of licence, and all categories of licences include prescribed conditions requiring that "*Any recommendations and/or recommended monitoring program identified in the technical reports will be described on the site plan …*" If properly written, monitoring and mitigation recommendations established as a site plan requirement can be enforced against the licensee through a variety of means. In one recent decision, the Ontario Municipal Board explicitly stated that because of the combination of enforcement provisions under the *Aggregate Resources Act* and appropriately worded site plans/ site plan notes, the Board was satisfied the project could be adequately regulated.[29]

The *Aggregate Resources Act* provides the Ministry of Natural Resources with a range regulatory tools to both coerce and compel compliance:

- Pursuant to section 15, all licensees are required to operate in accordance with the Act, regulations, site plan, and licence.[30]

- Aggregate inspectors can issues orders to comply under section 63 of the *Aggregate Resources Act* for breach of the Act or Regulations, which would include a breach of section 15. A section 63 order to comply can require a licensee to bring its operation into compliance forthwith or within a specified time. While orders can be appealed to the Minister, such appeal does not affect the operation.[31]

- The Minister can order a licencee to undertake progressive or final rehabilitation if rehabilitation is not being done in accordance with the Act, regulations, site plans, or licence.[32]

- The Minister can suspend a licence for "*any period of time, for any contravention of this Act, the regulations, the site plan or the conditions of the licence.*" The Minister's

[29] *Jennison Construction,* para 140

[30] *Aggregate Resources Act*, section 15

[31] *Aggregate Resources Act*, section 63.1 and subsection 63.1(9)

[32] *Aggregate Resources Act, s*ection 48

suspension can require specific actions be undertaken before the suspension is lifted, and it cannot be appealed.[33]

- The Minister can revoke a licence "*for any contravention of this Act, the regulations, the site plan or the conditions of the licence.*" A licencee has a right to a hearing before the Ontario Municipal Board, and the Ontario Municipal Board can confirm the revocation or direct the Minister to rescind the revocation. [34]

- It is an offence to contravene the *Aggregate Resources Act*, regulations, site plan, licence conditions, or fail to comply with an inspector's order to comply issued under section 63.[35] Fines for offences range from $500 to $30,000 per day, but may be increased to the value of any benefit accruing to the licensee as a result of committing the offence.[36]

- In addition to fines, the court can make any order it considers appropriate to ensure compliance with the *Aggregate Resources Act*, regulations, site plan or licence conditions.

While section 59.1 establishes a 5 year limitation period on prosecuting an offence, no such limitation applies with respect to the Minister's other powers.

An *Aggregate Resources Act* licence cannot be unilaterally surrendered to the Minister of Natural Resources as the Minister may only accept the surrender of a licence upon being satisfied that "*rehabilitation has been performed in accordance with this Act, the regulations, the site plan, if any, and the conditions of the licence."*[37] This system ensures that licensees remain subject to the regulatory system and enforcement provisions of the *Aggregate Resources Act* even when all economically productive work has finished and only rehabilitation work remains.

Finally, the requirement under section 12(1)(j) of the *Aggregate Resources Act* to have regard to the compliance history of an applicant when deciding upon a new licence establishes a powerful incentive for licensees to remain diligent about compliance, or risk being unable to licence additional resources to meet their business needs.

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[33] *Aggregate Resources Act*, section 22

[34] *Aggregate Resources Act*, section 20

[35] *Aggregate Resources Act*, section 57

[36] *Aggregate Resources Act*, section 58

[37] *Aggregate Resources Act,* section 19

Aggregate Resources Policy Manual

Ministry of Natural Resources staff have developed the "*The Aggregate Resources Program Policies and Internal Procedures Manual*" which provides guidance regarding numerous aspects of the *Aggregate Resources Act* and Ministry of Natural Resources' administrative procedures.[38] The Policy Manual is an excellent guide that explains both the Ministry of Natural Resources' general policy, and the procedure by which Ministry staff (or the proponent) should go about doing various things. In many instances, the policies and procedures provide additional detail regarding requirements that are set out in the *Aggregate Resources Act*, a regulation, or the Provincial Standards. However, unlike the Provincial Standards that are referentially incorporated into Ontario Regulation 244/97, the Policy Manual has no status under the *Aggregate Resources Act*. While it was developed to support consistent decision making, it does not cover all possible situations[39] and should not be assumed to do so.

Niagara Escarpment Planning And Development Act & Niagara Escarpment Plan

While all "provincial plans" build upon the provincial led policy system and the *Provincial Policy Statement* by establishing policies of particular relevance to the area in question, the Niagara Escarpment Plan warrants particular attention due to the manner in which it operates.

Concern over aggregate development was one of the main reasons that the *Niagara Escarpment Plan* and the *Niagara Escarpment Planning and Development Act* ("*NEPDA*") were created. The *Niagara Escarpment Plan* is the only "provincial plan" area where permission, in the form of a development permit, must be obtained for all development.

Within the area of development control established by the NEPDA, a development permit is required for all development that is not explicitly exempt from that requirement.[40] Development permits can include any number of conditions, including the requirement to enter into an agreement.[41] In fact, no other permit, condition, or licence can be issued until such time as a development permit has been issued to permit that work.[42] This requirement applies to the issuance of a new *Aggregate Resources Act* licence, and, depending upon the language and scope of the development permit that has been issued, it may also require that a new development permit be obtained if an *Aggregate Resources Act* licence or site plan is amended.

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[38] http://www.mnr.gov.on.ca/en/Business/Aggregates/2ColumnSubPage/266561.html

[39] Policy Manual, Policy 1.00.00 - Introduction / Acknowledgements

[40] *NEPDA,* section 24(1)

[41] *NEPDA*, sections 24(2), (2.1), 25(4)

[42] *NEPDA*, section 24(3)

There are two exemptions from the requirement to obtain a development permit that are relevant to aggregate operations.

1. Aggregate operations that have been continually licensed since 10 June 1975 are not required to obtain a development permit,[43]

2. Excavation of land, including boring holes, for the testing of aggregate in an *Escarpment Rural Area* designation or soil testing does not require a development permit.[44]

For new proposals, the second exemption is by far the most important as it allows proponents to undertake preliminary studies to determine the feasibility of an aggregate proposal without obtaining a development permit for those investigations.

Under the NEPDA, when development occurs in contravention of a development permit (or without one), offenders are subject to fines and the Minister of Natural Resources can issue orders to stop work and restore the site. In the event that a Minister's order is not complied with, the Minister can do the work and then charge the person the cost of the work.[45]

Pursuant to the *Niagara Escarpment Plan*, all aggregate operations except small Class B operations (<20,000 tonnes annually) require an amendment to the NEP in order to establish a new operation.[46] When the *Niagara Escarpment Plan* was prepared, the Niagara Escarpment Commission decided that requiring a *Niagara Escarpment Plan* amendment was the best way to ensure that potential impacts of aggregate development are adequately addressed.[47]

Conservation Authorities Act & Development Regulations

Section 28(2)(b) and (c) of the *Conservation Authorities Act,* permit all conservation authorities to make regulations:[48]

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[43] *O. Reg 828 / 1990*, section 5 paragraph 19. Note this exemption does not include certain water taking or discharge activities, construction, processing aggregate excavated elsewhere, or activities related to asphalt or concrete plants.

[44] *O. Reg 828 / 1990*, section 5 paragraph 24

[45] *NEPDA*, sections 24(4) to 24(7.2)

[46] *Niagara Escarpment Plan*, Part 1.9, New Mineral Resource Extraction Area, Policy 1 and 2

[47] Niagara Escarpment Proposed Plan - Phase 1Hearing Presentation (Ancaster) #13 -Mineral Resource Areas, NEC Submissions as presented to the Hearing Officers, April 17, 1980 page 6.

[48] *Conservation Authorities Act*, sections 28(1)(b), 28(1)(c)

> *b) prohibiting, regulating or requiring the permission of the authority for straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or watercourse, or for changing or interfering in any way with a wetland;*
>
> *(c) prohibiting, regulating or requiring the permission of the authority for development if, in the opinion of the authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development;*

Each conservation authority has its own regulations pertaining to "*development or interference with wetlands and alterations to shorelines and watercourses*".[49] However, aggregate proposals are exempt from the application of these regulations, such that no permit is required from a conservation authority if the activity is approved under the *Aggregate Resources Act*.[50] The purpose of this exemption is to avoid duplication of review and approvals process.[51]

Notwithstanding that no approval is required from a conservation authority when an aggregate proposal is within its jurisdiction, conservation authorities continue to have an important role in the evaluation of aggregate approvals.

- Conservation authorities are commenting agencies who are circulated on official plan and zoning by-law amendment applications[52] and *Aggregate Resources Act* licence applications.[53]

- Conservation authorities have been delegated responsibility to represent provincial interests and comment on natural hazards covered by section 3.1 of the *Conservation Authorities Act*.

- Certain conservation authorities provide planning advisory services to their constituent municipalities in respect of natural heritage and water resources.

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[49] Each conservation authority's regulation is based upon the generic regulation O. Reg. 97/04 Content of Conservation Authority Regulations Under Subsection 28 (1) of The Act: Development, Interference With Wetlands and Alterations to Shorelines and Watercourses

[50] *Conservation Authorities Act*, section 22(11)

[51] Ministry of Natural Resources letter, dated 21 December 2005, to Conservation Ontario and All Conservation Authorities

[52] O. Reg. 543/06 Official Plans And Plan Amendments, s.3(9); O. Reg. 545/06 Zoning By-Laws, Holding By-Laws And Interim Control By-Laws s. 5(9)

[53] Provincial Standards

- Certain conservation authorities have entered into agreements with the Fisheries and Oceans Canada pursuant to which they provide comments regarding potential impacts to fish habitat.

Ontario Water Resource Act

Although aggregate operations are differentiated by being above water table and below water table operations, a permission under the *Ontario Water Resources Act* is required for most aggregate operations either for water taking or water discharge works, but often both. Water may be used as part of aggregate operations to wash processed material, in settling ponds, or for dust suppression. Water from direct precipitation, overland flow, and ground water inflow to the excavation must be managed. Although the *Aggregate Resources Act* and Provincial Standards require that the potential impact of an aggregate operation on water resources and water dependant natural heritage features be studied, the studies do not guarantee that *Ontario Water Resources Act* permissions will be successfully obtained.

Prescribed licence conditions require licensees to obtain a permit to take water or a certificate of approval for a water discharge system, when required[54]. The Ministry of the Environment and the Ministry of Natural Resources have signed a memorandum of understanding to coordinate their actions with respect to the processing of aggregate applications, as well as the ongoing oversight and monitoring of aggregate operations.[55]

Despite acknowledgement that approvals under the *Ontario Water Resources Act* are required in connection with aggregate proposals, the Ministry of the Environment will not normally process an application for water taking or water discharge until the land use and the *Aggregate Resources Act* licence has been approved. However, in at least one decision the Ontario Municipal Board made obtaining the required permit to take water and certificate of approval for water discharge as a condition precedent to the issuance of the *Aggregate Resources Act* licence.[56]

Environmental Bill Of Rights

Proposals for *Aggregate Resources Act* licences, adding or varying licence conditions, or amending an *Aggregate Resources Act* site plan are all Class II instruments,[57] and, as such, are

[54] Ontario Water Resources Act, section 53. Note as a result of amendments to the Environmental Protection Act by An Act to Promote Ontario as Open for Business by Amending or Repealing Certain Acts, 2010, c. 16, Sched. 7, s. 2 (15), these approvals are now covered by "Environmental Compliance Approvals".

[55] Provincial Standards, Appendix A - Memorandum of Understanding: MNR/MOE Roles and Responsibilities for Pit and Quarry Operations in Ontario

[56] *Re Barbara McCarthy and MAQ Aggregates Inc., OMB File #* PL010623, decision dated 4 January 2012,

[57] *O. Reg. 681/94,* Classification Of Proposals For Instruments

subject to the substantive requirements of the Environmental Bill of Rights, including notification by posting on the Environmental Registry.

In addition, the Ministry of Natural Resources is required to have a Statement of Environmental Values that the Minister must take every reasonable step to ensure is considered when "*decisions that might significantly affect the environment are made in the ministry*".[58] The Ministry of Natural Resources' Statement of Environmental Values is considered when the Minister "develops Act, regulations, and policies"[59], which would include the *Aggregate Resources Act*, its regulations, the Provincial Standards, and presumably the Policy Manual.

Other Legislation

As with the *Ontario Water Resources Act*, there are several other pieces of legislation for which approvals must be obtained or compliance maintained in order to operate a pit or quarry. For example:

- Noise and dust from on-site vehicles and processing equipment are just two matters that require approvals under the *Environmental Protection Act.*
- Air and ground vibrations from blasting operations must be maintained within Ministry of Environment established limits or risk breaching the *Environmental Protection Act*.
- Endangered and threatened species and their habitats must be protected in accordance with the *Endangered Species Act, 2007* unless a permit is issued or an exemption exists to allow an otherwise prohibited activity.
- Permits may need to be obtained under the *Lakes and Rivers Improvement Act*.
- A permit can be obtained under the *Fisheries Act* to permit activity that would otherwise result in a Harmful Alteration, Disruption, or Destruction to fish habitat.
- Fuel storage and handling must be done in accordance with the *Technical Standards and Safety Authority Act, 2000*.

Finally, the *Clean Water Act, 2006* bears mention as it will create an additional layer to the regulation over aggregate operations by virtue of source water protection plans being developed under that legislation. One significant feature of the *Clean Water Act*, *2006* is the requirement to

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[58] *Environmental Bill of Rights*, section 11

[59] *Ministry of Natural Resources, Statement of Environmental Values* available at http://www.ebr.gov.on.ca/ERS-WEB-External/content/sev.jsp?pageName=sevList&subPageName=10002

amend existing *Aggregate Resources Act* licences to conform with specified policies once a source water protection plan comes into force.[60]

RECENT TRENDS AND ISSUES

Interpretation Of The Provincial Policy Statement In The Context Of Aggregate Resources

Aggregate resources are a non-renewable resource found in fixed locations. Therefore, there is a public interest in protecting aggregate resources in the locations where they exist. Rather than regarding aggregate extraction as something to be restricted, the *Provincial Policy Statement*, and its policies are intended to protect mineral aggregate resources for long-term use. Aggregate resources are given a privileged position in the *Provincial Policy Statement*.[61]

Provincial policy recognizing the importance of aggregate resources has developed from the first Mineral Aggregate Resource Policy Statement, the Comprehensive Set of Policy Statements and the *Provincial Policy Statement*. The aggregates policies were amended in the *Provincial Policy Statement* in 2005 to enhance the existing policy direction.[62] The more significant aggregate polices will be discussed below.

Protection of Aggregate Resources

The *Provincial Policy Statement* policies are intended to protect aggregate resources for the long term. The protection of aggregate resources is not limited to considering applications for specific aggregate proposals, but also requires municipalities to ensure that uses which may not be compatible with aggregate operations are not permitted in resource areas. The concern with incompatible development is the potential for an economically recoverable resource to be sterilized by the development of new uses that are incompatible with aggregate operations. Therefore, locating incompatible uses in areas of known aggregate deposits will only be permitted if it can be demonstrated that extraction is not feasible or that there is a greater public interest in permitting the competing use to proceed.

> *2.5.1 Mineral aggregate resources shall be protected for long-term use.*
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> *2.5.2.3 The conservation of mineral aggregate resources should be promoted by making provision for the recovery of these resources, wherever feasible.*

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[60] *Clean Water Act, 2006*, S. O. 2006, c. 22, section 43 and Ontario Regulation 287/07 - General, section 1.0.1

[61] *Capital Paving Inc. v. Wellington (County)*, 2010 CarswellOnt 697, OMB Case No.: PL PL080489 decision dated January 19, 2010, para 16 [*Capital Paving*]

[62] *Dennis H. Wood, Provincial Plans: A Source Book (Toronto: Carswell, 2008),* page 563, Comparison of PPS 1997 and PPS 2005

2.5.2.4 *Mineral aggregate operations shall be protected from development and activities that would preclude or hinder their expansion or continued use or which would be incompatible for reasons of public health, public safety or environmental impact. Existing mineral aggregate operations shall be permitted to continue without the need for official plan amendment, rezoning or development permit under the Planning Act. When a license for extraction or operation ceases to exist, policy 2.5.2.5 continues to apply.*

2.5.2.5 *In areas adjacent to or in known deposits of mineral aggregate resources, development and activities which would preclude or hinder the establishment of new operations or access to the resources shall only be permitted if:*

a. *resource use would not be feasible; or*

b. *the proposed land use or development serves a greater long-term public interest; and*

c. *issues of public health, public safety and environmental impact are addressed.*

<u>*Close to Market*</u>

The *Provincial Policy Statement*, Policy 2.5.2.1, provides that as much of the mineral aggregate resources as realistically possible shall be made available as close to markets as possible.

2.5.2.1 *As much of the mineral aggregate resources as is realistically possible shall be made available as close to markets as possible.*

Aggregate resources have a high bulk and low per unit value, which is a constraint on the distance that they can be economically transported. Aggregates are required in larger quantities in economically active regions and growth centres. Transporting aggregates longer distances increases the cost of the resource to the user and the cost of the final products that use aggregate as inputs, such as public infrastructure projects and housing. Therefore, there is a public interest in ensuring that aggregate resources are extracted as close to market as possible in order to support the Provincial economy. In addition, maintaining close to market supplies of aggregates:

- minimizes other effects of transportation such as air quality, greenhouse gas emissions and fossil fuel consumption,[63] [64] and

[63] *State of the Aggregate Resource in Ontario Study*, *Consolidated Report,* February 2010, page 17, 18

[64] *Protocol for Ministry of Natural Resources (MNR) Responses to Niagara Escarpment Plan (NEP) Amendment Applications Circulated by the Niagara Escarpment Commission (NEC) to Create or Expand Mineral Aggregate Operations,* page 5

- avoids unnecessarily transferring the effects of extraction to other jurisdictions.[65]

The policy direction to make aggregate resources available close to markets is subject to two qualifications:

- it must be realistically possible to extract the resource (*Provincial Policy Statement*, Policy 2.5.2.1); and

- the extraction shall be undertaken in a manner which minimizes social and environmental impacts (*Provincial Policy Statement*, Policy 2.5.2.2).

In interpreting the *Provincial Policy Statement*, these two qualifications have been considered together, and suggest that if the social and environmental impacts have not been minimized, then it may not be realistically possible to extract the resource. For instance, in *Capital Paving* the Ontario Municipal Board found that it was not realistically possible to extract the resource from a proposed gravel pit given that the possible social and environmental impacts had not been minimized.[66]

The Ministry of Natural Resources and the Niagara Escarpment Commission have developed a protocol for commenting on aggregate proposals. That protocol indicates that the Ministry of Natural Resources interprets "realistically possible" to include consideration of other *Provincial Policy Statement* policies, the available infrastructure, and existing development near the proposed extraction.

> *"Realistically possible" can be interpreted to mean that the provision of aggregate resources close to market is not without possible limitations. These will generally be limitations created by the consideration of not only other PPS policies but also other considerations such as available infrastructure or existing development adjacent to the area proposed for extraction. This could limit the amount of aggregate extracted or the period over which the aggregate is extracted. It must be determined on an application by application basis.*[67]

The *Provincial Policy Statement*, Policy 2.5.2.2, requiring that social and environmental impacts from aggregate operation be minimized[68] is consistent with the purpose of the *Aggregate Resources Act*, section 2(d), which is to minimize the adverse impact of extraction on the

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[65] *State of the Aggregate Resource in Ontario Study*, *Consolidated Report*, February 2010, page 18

[66] *Capital Paving*, paras 30, 37

[67] *Protocol for Ministry of Natural Resources (MNR) Responses to Niagara Escarpment Plan (NEP) Amendment Applications Circulated by the Niagara Escarpment Commission (NEC) to Create or Expand Mineral Aggregate Operations,* page 4, 5, 9

[68] *Provincial Policy Statement, Policy 2.5.2.2*

environment. This policy suggests some level of social and environmental impact from aggregate operations is acceptable.[69] For instance, in *Jennison Construction* the Board noted that "*with respect to the issue of noise, silence is not the test. Instead, acceptable noise guidelines have been developed by the MOE."* [70]

No Demonstration of Need Required

In 2005 the *Provincial Policy Statement* aggregate policies were amended to make it clear that proponents are not required to demonstrate that there is a need for the aggregate resource. The *Provincial Policy Statement* close to market policy[71] was amended by removing reference to making aggregate "available to supply mineral resource needs" and adding the following:

> *Demonstration of need for mineral aggregate resources, including any type of supply/demand analysis, shall not be required, notwithstanding the availability, designation or licensing for extraction of mineral aggregate resources locally or elsewhere.*

Prior to the introduction of this amendment, opponents, including municipalities who sought to restrict further aggregate development within all or a part of their jurisdiction, often claimed that there was no need for the particular resource to be developed at that time. The most recent Ontario wide studies confirm that the adequacy of aggregate reserves continues to be a concern, particularly in proximity to the Greater Toronto Area.[72] In recent cases, the Ontario Municipal Board has confirmed that there is no longer a requirement to undertake a supply and demand analysis to demonstrate a need for the aggregate resource.[73]

Aggregates and Determination of No Negative Impacts on Natural Heritage Features

Level of Proof

The *Provincial Policy Statement* requires a proponent to demonstrate that there will be no negative impact on the natural features or their ecological functions.[74] The recent decisions in

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[69] *Capital Paving,* para 16

[70] *Jennison Construction,* para 33

[71] See policy 2.5.2.1 in the *Provincial Policy Statement*, 2005 and policy 2.2.3.1 in the 1997 *Provincial Policy Statement*

[72] *State of the Aggregate Resource in Ontario Study*, *Consolidated Report*, February 2010, Section 8.2 - Key Findings, page 24, 25

[73] *Jennison Construction,* paras 117, 118

[74] *Provincial Policy Statement*, Policy 2.1.4, 2.1.6

James Dick Construction[75] and *Jennison Construction* have raised an interesting issue regarding the level of proof or evidence that is required to demonstrate that there will no negative impact on the natural heritage features.

In *James Dick Construction* the Board found that the proponent's consultants had done a considerable amount of data collection and analysis and had arrived at "countless supportable conclusions." However, the Board went on to say that the demonstration of no negative impact on the natural environment requires more than reaching supportable conclusions.[76] The Board found that the requisite degree of certainty regarding the efficacy of the mitigation and demonstration that there would be no negative impact on natural features would only be done through the additional testing and analysis proposed to be undertaken at a later date in accordance with the adaptive management plan. As a result, the Board was not able to conclude that the proposed quarry was consistent with the *Provincial Policy Statement*.[77]

> *264 Until the work set out in the AMP is completed, the Board finds that the requisite degree of certainty about the efficacy of mitigation has not been demonstrated. The Board finds that an unmitigated or an inadequately mitigated quarry could have a disastrous effect on the natural features and functions on the lands surrounding the subject property. Therefore a high degree of certainty, which would be attendant upon demonstration by JDCL, is required before the Board approves the applications. Such demonstration has not taken place.*[78]

In *Jennison Construction* the Board distinguished *James Dick Construction* on the facts. It found that the proponent had demonstrated that the proposed pit was consistent with the *Provincial Policy Statement*, including that there would be no negative impact on the natural features, particularly the significant woodland.[79]

These cases leave proponents with difficult decisions. How much data collection, modelling and analysis must be done to satisfy the policy tests? What additional work can be delayed until after the principle of the land use has been established? Given the dynamic nature of natural heritage features and systems, there can never be absolute certainty regarding future outcomes. It seems that the ability to set milestones in an adaptive management plan which would permit an examination of mitigation measures over time is a desirable planning tool. As the Board found in *Jennison Construction,* the phased approval of extraction based on meeting milestones is a

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[75] *James Dick Construction Ltd. v. Caledon (Town)*, [2010] O.M.B.D. No. 905 [*James Dick Construction]*

[76] *James Dick Construction,* para 243, 241

[77] *James Dick Construction,* para 236, 239, 240, 263, 264

[78] *James Dick Construction*, para 264

[79] *Jennison Construction,* para 84, 85

"prudent and sound planning tool once the appropriateness of the land use change has been determined.[80]

What Can be Taken into Account in Assessing Negative Impacts

The guidance in the *Natural Heritage Reference Manual* should be taken into account when interpreting the *Provincial Policy Statement*.[81] The *Natural Heritage Reference Manual* clarifies the matters that can be considered when determining whether there will be a negative impact, including that mitigation measures can be taken into account. As an example, the *Natural Heritage Reference Manual* provides that the replacement of significant woodland through mitigation measures is an appropriate consideration provided that the replaceability of the woodland components and functions is achieved within a reasonable timeframe.

> *13.2 The PPS definition for "negative impacts" does not state that all impacts are negative, nor does it preclude the use of mitigation to prevent, modify or alleviate the impacts to the significant natural heritage feature or area. For example, demonstration of no negative impacts on significant woodland through mitigation measures maybe contemplated, provided that factors such as the successional status and replaceability of the woodland components and functions within a reasonable time frame (e.g., 20 years) are considered.*[82]

Mitigation is broadly defined in the *Natural Heritage Reference Manual* to include all actions that reduce or eliminate impacts from development.

> *mitigation: the prevention, modification or alleviation of impacts on the natural environment, and – specifically in the context of policies 2.1.4 and 2.1.6 and the definitions in the PPS – the prevention of negative impacts. Mitigation also includes any action intended to enhance beneficial effects.*[83]

The *Natural Heritage Reference Manual* also clarified that rehabilitation of aggregate operations after extraction may be taken into consideration in the demonstration of no negative impact where such rehabilitation is: (i) scientifically feasible, and (ii) conducted consistent with the *Provincial Policy Statement*, Policy 2.5.3.1, regarding rehabilitation and with other government standards.[84]

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[80] *Jennison Construction,* para 85

[81] *Jennison Construction,* para 70

[82] *Natural Heritage Reference Manual,* section 13.2, page 119

[83] *Natural Heritage Reference Manual,* page 217

[84] *Natural Heritage Reference Manual,* page 11

In *Jennison Construction* the Ontario Municipal Board determined that a portion of a significant woodland could be removed for extraction. In assessing whether the proposed pit would result in a negative impact, the Board considered the proposed mitigation measures including the woodland planting program and the long term enhancement of the woodland that would result from the rehabilitation of the proposed pit.[85]

> *94 It is the Board's finding that mitigative measures including replacement and enhancement are contemplated by the 2005 PPS and the Municipal Official Plans, and may be considered when dealing with the loss of a portion of significant woodland, its interior forest, its wildlife habitat, and water features, as set out at Section 2 of the 2005 PPS.*[86]

Furthermore, in *Jennison Construction* the Ontario Municipal Board found that it is not important whether the mitigation measure is called reforestation, restoration or rehabilitation.[87]

> *95 Whether the mitigation measure is called reforestation, restoration or rehabilitation is not important. The 2005 PPS test is whether the mitigation activity being proposed has the ability to remove or ameliorate any negative impacts that "threatens the health and integrity of the natural features or ecological functions for which an area is identified" and whether the mitigation measures will result in enhanced beneficial effects which might result from the loss of a portion of the significant woodland, Forest Patch 38.*

Balancing Provincial Policy Statement Policies and the Public Interest

In determining whether or not a particular application conflicts with the *Provincial Policy Statement*, one must read the *Provincial Policy Statement* in its entirety.[88] In considering aggregate proposals, one must balance the aggregate policies in the *Provincial Policy Statement* (Policy 2.5) with all the other policies of the *Provincial Policy Statement*. The *Provincial Policy Statement* aggregate policies do not override the other policies of the *Provincial Policy Statement*.[89] Balancing these competing public interest objectives is often difficult. In particular, there are often conflicting public interests in regard to preserving natural heritage features and making aggregate resources available in proximity to their market.[90] As the Board noted in two

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[85] *Jennison Construction,* para 71

[86] *Jennison Construction*, para 94

[87] *Jennison Construction,* para 95

[88] *Provincial Policy Statement,* Policy 4.3; and *James Dick Construction,* para 37

[89] *Capital Paving*, para 30

[90] *Jennison Construction,* para 97, 123, 129

recent decisions, "*The determination of public interest with respect to planning matters is not a popularity contest but must instead be based upon sound planning principals and approved planning policies at both the Provincial and local levels"*.[91]

In *Jennison Construction* the Ontario Municipal Board found that the competing public interests are balanced in the *Provincial Policy Statement* by permitting the proposed aggregate extraction as an interim use of land and then requiring that the site be returned to a natural state after extraction.[92]

Provincial Policy Statement Aggregate Policies and Official Plan Policies

The *Provincial Policy Statement* provides that an official plan is the most important vehicle for implementation of the *Provincial Policy Statement* and that planning authorities may go beyond the minimum standards established in the *Provincial Policy Statement.* However, a municipality cannot impose higher standards in its official plan if doing so would conflict with another policy in the *Provincial Policy Statement*.

> *4.5 The official plan is the most important vehicle for implementation of this Provincial Policy Statement.*
>
> *4.6 The policies of this Provincial Policy Statement represent minimum standards. This Provincial Policy Statement does not prevent planning authorities and decision-makers from going beyond the minimum standards established in specific policies, unless doing so would conflict with any policy of this Provincial Policy Statement.*[93]

In a non-aggregate context, the Ontario Municipal Board held that it was not sufficient to raise broad apprehensions of a conflict with *Provincial Policy Statement* policies. Instead, there must be specific policies of the official plan that are in conflict with the *Provincial Policy Statement*.[94] In the aggregate context, it can be argued that official plan policies that either preclude aggregate development in, or require demonstration of no negative impact on, natural heritage features that are not identified as significant in the *Provincial Policy Statement* would be inconsistent with the *Provincial Policy Statement* policy to make available "as much of the mineral aggregate resources as is realistically possible."

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[91] *Jennison Construction,* para 125; and *Re Barbara McCarthy and MAQ Aggregates Inc., OMB File #* PL010623, decision dated 4 January 2012

[92] *Jennison Construction*, para 129

[93] *Provincial Policy Statement,* Policies 4.5, 4.6

[94] *Perth South (Township) v. Perth (County),* PL100154, 26 September 2011, , paras 22 - 28

Adaptive Management Plans

In the context of an aggregate operation, adaptive management plans are now being used to consolidate existing requirements for monitoring and mitigation actions related to groundwater, surface water and the natural environment into a single coordinated document. "The concept of "adaptive management" responds to the difficulty, or impossibility, of predicting all the environmental consequences of a project on the basis of existing knowledge. It counters the potentially paralyzing effects of the precautionary principle on otherwise socially and economically useful projects".[95]

The adaptive aspect of an adaptive management plan requires that monitoring and mitigation be adapted to reflect actual conditions that are experienced. For instance, adaptive management has the additional advantages set out below.

- It provides a planned and systematic process of continuously improving environmental management practices by learning from their outcomes.
- It provides flexibility to identify and implement new mitigation measures or to modify existing ones during the life of a quarry.
- It provides flexibility to modify mitigation measures or develop and implement additional measures in light of real-world experience.

The exact content of an adaptive management plan will depend on the nature of the proposed use.

Adaptive management plans provide an additional layer of oversight, and are considered to be an improvement over past practices. In the past, monitoring and mitigation programs were established at the time the licence was issued. There was neither a requirement nor a mechanism to compel aggregate operators to modify or adapt operations or proposed mitigation over time in response to the actual conditions experienced.

The adaptive management approach is not mandated by any legislation. There are no policies in the Provincial Standards that specifically require an adaptive management plan or identify the required content of an adaptive management plan. However, the Provincial Standards already require technical reports to identify monitoring plans, mitigation measures and trigger mechanisms, and contingency plans.[96]

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[95] *Canadian Parks and Wilderness Society v. Canada (Minister of Canadian Heritage)*, 2003 FCA 197, [2003] 4 F.C. 672, para 24

[96] Provincial Standards, Report Requirements for Category 1 -8 Licences

Adaptive management plans are becoming more common and broadly accepted as a tool to manage potential environmental impacts. It is widely acknowledged that adaptive management plans are a useful contemporary tool for dealing with the uncertainties inherent in a complex operation, such as a quarry, as a means to ensure that the operation and mitigation responses are adapted to unanticipated conditions, should they occur in the future.[97] The adaptive management approach has been endorsed by local municipalities, regional municipalities, conservation authorities, the Ministry of Natural Resources, and Joint Board decisions.[98]

Although there are adaptive elements to the monitoring and mitigation required at some existing aggregate operations, there are very few formal adaptive management plans. Adaptive management plans are in place for Dufferin Aggregates' (Holcim Canada Inc.) Milton Quarry Extension and Hanson Brick's Tansley Quarry in the City of Burlington. Adaptive management plans have been proposed in many of the new ARA applications under consideration (i.e. Walker Aggregates Quarry Expansion in Clearview Township, Nelson Aggregates Burlington Quarry Expansion, M.A.Q. Aggregates Inc. quarry proposal in the Township of Grey Highlands, and The Highland Companies' quarry proposal in Melancthon Township).

In recent hearings regarding aggregate applications several issues have been raised regarding adaptive management plans. These will be discussed below.

Does an adaptive management plan amount to improper delegation if it provides for subsequent approvals/milestone after the land use is approved?

In several recent cases parties in opposition to an aggregate proposal argued that a proposed adaptive management plan that required the Ministry of Natural Resources to approve actions after the Board hearing amounted to improper delegation by the Ontario Municipal Board.

In *James Dick Construction* the proposed adaptive management plan set certain milestones that were required to be met to the satisfaction of the Ministry of Natural Resources before subsequent phases of the quarry extraction could proceed. The milestones related to matters, such as the additional testing of a grout curtain, that the Board found were central to demonstrating that there would be no negative impacts on natural heritage features and were vital to the operation of the adaptive management plan.[99] The Board held that in discharging its duty under the *Planning Act* and the *Aggregate Resources Act* it must make a determination on all the issues before it, including whether the applicant had demonstrated that the proposed quarry would not result in an unacceptable or negative impact on natural heritage features and functions.

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[97] *JART (Joint Agency Review Team) Report, The Nelson Aggregate Co. Burlington Quarry,* dated February 2009, Section 13, Adaptive Management Plan, page 118

[98] *JART (Joint Agency Review Team) Report, The Nelson Aggregate Co. Burlington Quarry,* dated February 2009, page 119

[99] *James Dick Construction Ltd*, para 251

In that instance, the Board was not satisfied that the proponent had provided sufficient evidence to demonstrate that the natural heritage features would be protected in accordance with the *Provincial Policy Statement*, and it would be improper to leave that determination to a future time.[100]

In the more recent *Jennison Construction* case the issue of delegation was also considered. The proponent proposed removing portions of a significant woodland, and to mitigate the removal by a sequential reforestation, rehabilitation and restoration program. The proposal included a Woodlot Rehabilitation and Restoration Plan that established parameters for determining the success of the mitigation. Successive phases of extraction were dependent on the Ministry of Natural Resources' determination as to whether the success parameters for the woodland restoration were met, and if they were not met, the proponent would have to adapt the reforestation in order to meet those parameters. The opponents argued that Ministry of Natural Resources' subsequent authorization to proceed with additional phases would be an improper delegation.

The Ontario Municipal Board found that there was no improper delegation since it was satisfied that the impacts associated with the gravel pit application had been properly addressed in the context of Provincial and local planning policy regimes.[101] In coming to this conclusion the Ontario Municipal Board found that:

> *85 It is not uncommon with planning approval documents that there be a conditional approval of the land use change or project subject to entering into contractual agreements (e.g. draft plans of subdivision agreements, site plan agreements, agreements subject to provisional consents and development permits). In the case of the ARA licence conditions this is no different and runs parallel to the long term responsibilities of the Ministry of Natural Resources and other agencies to ensure that the conditions of the ARA licence and their specific regulations that sanctioned the land use in the first place are being followed. Sequential further approval based upon performance as opposed to a blanket approval in the Board's finding is a prudent and a sound planning tool once the appropriateness of the land use change has been determined. This is particularly important when one is dealing with a living, dynamic and changing Natural Heritage Feature such as a woodland over an extended period of time.*
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> *86 Prudence in such circumstances would demand that the success of the Woodlot Rehabilitation and Restoration Plans be monitored over time as opposed to a blanket approval.*[102]

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[100] *James Dick Construction*, paras 265 to 268, 271

[101] *Jennison Construction*, para 84

[102] *Jennison Construction*, paras 85, 86

The Board in *Jennison Construction* distinguished its decision from the findings in *James Dick Construction* on a factual basis, namely the nature of the additional investigations and approvals that were required to be made by Ministry of Natural Resources after the Board hearing.[103]

The message to be taken from these two decisions is that, at a threshold level, a proponent must satisfy the Ontario Municipal Board that the applicable policy tests have been met. Once this has been demonstrated, an adaptive management approach is appropriate and provides for additional protection of the environment.

Does the Ministry of Natural Resources have the Capacity to Administer, Review and Enforce an Adaptive Management Plan?

In several recent cases, opponents of aggregate proposals have argued that the Ministry of Natural Resources does not have the resources or expertise to monitor the proposed aggregate operation as contemplated by a proposed adaptive management plan.

In *James Dick Construction* the Board heard evidence from an aggregate technical specialist from the Ministry of Natural Resources. The Board found that the proposed adaptive management plan involved far more than what Ministry of Natural Resources normally deals with in site plan notes, and that the Ministry of Natural Resources did not have the resources to fulfill the requirements of the adaptive management plan.[104] The Board went on to say that it would not leave the issue of the protection of the natural environment to a third party with demonstrably inadequate resources, like the Ministry of Natural Resources.[105]

In the more recent *Jennison Construction* case, the Board also heard evidence from staff of the Ministry of Natural Resources who confirmed that the Ministry had the resources and the expertise to properly evaluate reports on the success of the Woodlot Rehabilitation and Restoration Plan and monitor the gravel pit operations in accordance with the Ministry's legislated mandate.[106] The Board did not accept the submissions or evidence of the opponents that the Ministry of Natural Resources lacks the resources, manpower or expertise to undertake the evaluations required by the site plan notes and the adaptive management plan. Furthermore, the Board (Mr. Atcheson) found that:

> *The ongoing funding levels of Provincial Ministries is not a matter within the jurisdiction of this Board, and is best left to the Environment Commissioner, the*

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[103] *Jennison Construction*, para 83

[104] *James Dick Construction*, paras 268, 269

[105] *James Dick Construction*, para 270

[106] *Jennison Construction*, para 80

> *responsible Minister, and the Government of the day. This is not, in the Board findings, a determinative matter in this case.*[107]

In our opinion, the Board's most recent decision correctly reflects the law. The capacity of any Ministry or agent of government to fulfil its legislative mandate is not a valid or proper land use planning ground upon which the Board should base a land use decision. The Board must make a decision on the basis of valid and proper land use planning policies.

When making a decision regarding an aggregate application the municipality, the Minister of Natural Resources, and the Board are required to consider the provisions and requirements of the *Planning Act*, the *Provincial Policy Statement* and the *Aggregate Resources Act*. There is nothing in any of the applicable policy, statutes or regulations that requires an applicant for a quarry licence to demonstrate that the provincial regulator for aggregates has the expertise and/or resources to fulfil its statutory mandate.

The allocation of resources to the Ministry of Natural Resources is a policy a matter within the exclusive purview of the Government of Ontario who delegates authority and provides the necessary financial resources to its various Ministries. If at any time it is determined by the Government of Ontario that any Ministry is under-funded or lacks capacity with regard to any particular function, it can take the action it determines most appropriate to address whatever concerns are identified. Land use planning should not be suspended in the meantime.

Are the Provisions of an Adaptive Management Plan Enforceable?

In recent cases, the opponents of a proposed aggregate operation have argued that the provisions of an adaptive management plan are not legally enforceable. The arguments in support of this position are that: (i) adaptive management plans are new and untested, (ii) adaptive management plans are not mandated by any policy or legislation, and (iii) there is no legal basis for enforcement of the provisions of an adaptive management plan.

In the Dufferin Aggregates (Holcim Canada Inc.) Milton Quarry Extension, the adaptive management plan was both a condition of the licence and a site plan note that required that the quarry be operated in accordance with the adaptive management plan. The approach has been carried forward in recent aggregate proposals, in which the *Aggregate Resources Act* site plan notes required operation in accordance with the adaptive management plan.

Once an adaptive management plan is incorporated into the *Aggregate Resources Act* site plans the enforcement mechanisms under the *Aggregate Resources Act* can be used to ensure that the pit or quarry is operated in accordance with the adaptive management plan. In *Jennison Construction,* although the enforceability of an adaptive management plan was not specifically raised as an issue, the Board was satisfied that the *Aggregate Resources Act* provides sufficient

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[107] *Jennison Construction*, para 81

enforcement mechanisms to ensure that the pit was operated in accordance with the Woodlot Rehabilitation and Restoration Plan, which was incorporated by reference on the site plan.[108]

In addition, monitoring and mitigation (including an adaptive management plan) regarding water related matters will also be set out in a any approvals pursuant to the *Ontario Water Resources Act,* which Act includes its own enforcement mechanisms.[109]

The issue of the enforceability of the proposed adaptive management plan was raised in the recent hearing regarding Walker Aggregates proposed Duntroon Quarry expansion. However, as of the date of this paper, the Joint Board has not rendered its decision in that case.

Are Adaptive Management Plan Agreements Required?

In regard to the Dufferin Aggregates Milton Quarry Extension, the proponent entered into agreements with the Region of Halton and Conservation Halton which dealt with mitigation and a number of aspects of the adaptive management plan. The agreements were entered into as part of a settlement. Many of the matters dealt with in those agreements related to complex interactions between the proponent and the agencies regarding matters that went beyond the operation of the quarry. For instance, after extraction Conservation Halton will be the owner of a large portion of the quarry lands and also take on the responsibility of owning and operating the water management system in perpetuity.

Using Dufferin Aggregates' Milton Quarry Extension as an example, the Board in *James Dick Construction* suggested that agreements were necessary for any proposal involving a complex adaptive management plan.[110]

We do not know whether the Board in *James Dick Construction* in making that finding was fully aware of the particular circumstances of the Dufferin Aggregates' Milton Quarry Extension. However, it is arguable that the proponent entered into the agreements to give effect to its settlements with the Region of Halton and Conservation Halton, and because of the particularly complex ongoing relationships which may not be applicable to other aggregate operations. Since adaptive management plans are enforceable as licence or site plan conditions (as discussed above), then agreements with municipalities or conservations authorities are not required for the purpose of enforcement.

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[108] *Jennison Construction,* paras 140 and 144

[109] *Ontario Water Resources Act,* R.S.O. 1990, O. 40, section 16, section 16(3), section 34 (3), section 34(8), sections 108, 109, sections 80, 81 - Orders regarding contravention of Ontario Water Resources Act, or the terms or conditions of a licence or approval

[110] *James Dick Construction*, para 282

The requirement for agreements regarding the adaptive management plan was raised in the Walker Aggregates proposed Duntroon Quarry expansion, and presumably the Joint Board's decision in that case will address this issue.

Precautionary Principle

The role of the "precautionary principle" in evaluating both environmental and land use approvals, including aggregate applications, has recently been raised in several cases. In particular, it has been argued that because of the inherent uncertainty in the natural environment, decision makers should adopt a cautious approach and aggregate operations should not be approved.

The application of the precautionary principle raises some very interesting issues, which are beyond the scope of this paper. A few of the issues are mentioned below.

What is the proper articulation of the precautionary principle?

The precautionary principle is about taking steps to prevent the negative environmental consequences of actions. It speaks to implementing measures to prevent environmental damage even if there is scientific uncertainty about whether the harm will materialize or the remedial measures will work.

In *Sierra Club v. Ontario* the courts recognized that there is no consistent wording describing the precautionary principle, and the enunciation of the "principle" can be found in different places using different words.[111] In the absence of a clearly articulated statement of the precautionary principle, it is questionable whether it is fair or appropriate to give the principle the same consideration or weight as a statutory, regulatory, or policy requirement.

What role does the precautionary principle play in decision making regarding aggregate resources?

It should be noted that the precautionary principle is not a statutory or regulatory requirement in regard to the approval of aggregate resource applications. However, it has been argued that the precautionary principle comes into play by virtue of the Ministry of Natural Resources Statement of Environmental Values ("MNR SEV"). This is discussed below.

To our knowledge there is no Ontario Municipal Board or Joint Board decision dealing directly with the precautionary principle in the context of an aggregate application. However, both the

[111] *Sierra Club Canada v. Ontario (Natural Resources & Transportation), 2011 ONSC 4655,* paras 44 and 53 [*Sierra Club v. Ontario*]

Environmental Review Tribunal and the courts have recently considered the precautionary principle in other contexts.[112]

Precautionary Principle and Ministry of Natural Resources Statement of Environmental Values

The *Environmental Bill of Rights,* section 11, requires the Minister of Natural Resources to adopt a statement of environmental values and to take every reasonable step to consider the MNR SEV when making decisions that might significantly affect the environment. The requirement from the *Environmental Bill of Rights* is not "to be consistent with" or " to comply with" any particular principle in the MNR SEV.

However, it has been argued that because one of the eleven principles in the MNR SEV refers to exercising caution in the face of uncertainty, the Ministry's decisions must be consistent with the "precautionary principle". The principle in the MNR SEV is:

> *As our understanding of the way the natural world works and how our actions affect it is often incomplete, MNR staff should exercise caution and special concern for natural values in the face of such uncertainty.*[113]

In *Sierra Club v. Ontario* the Divisional Court held that the expression of the precautionary principle in the MNR SEV states only that, in the face of uncertainty, the Ministry staff should exercise caution and concern for natural values. It does not impose an overarching requirement that a permit under the *Endangered Species Act* will only be issued where any uncertainly regarding the potential impact on the environment is resolved.[114] The Divisional Court further held that "if the precautionary principle were intended to apply to permits under the *Endangered Species Act, 2007*, then it was open to the Legislature to specifically include it as a requirement for the issuance of a permit".[115] Presumably, similar reasoning would apply to the application of the precautionary principle to approvals under the *Planning Act* and *Aggregate Resources Act*.

Vertical Zoning

Another issue that is on the horizon is whether municipalities should be able to regulate the depth of an aggregate operation through zoning. Two issue arise: (1) whether municipalities have the

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[112] See for example *Ericson v. Director, Ministry of the Environment,* ERT File No. 10-121\10-122 decision issued 18 July 2001 and *Sierra Club of Canada v. Ontario (Natural Resources & Transportation),* 2011 ONSC 4655, decision issued 27 September 2011

[113] *Ministry of Natural Resources Statement of Environmental Values*

[114] *Sierra Club v. Ontario,* paras 53, 55

[115] *Sierra Club v. Ontario*, para 58

statutory authority to vertically zone aggregate operations, and, (2) if they do, is vertical zoning appropriate as a matter of public policy.

The issue is presently being considered in Waterloo Region. The Region of Waterloo adopted a new official plan which included policies that contemplate vertical zoning. In approving the new Waterloo Region Official Plan, the Minister of Municipal Affairs and Housing modified the Official Plan to remove the policies regarding vertical zoning. The Waterloo Region Official Plan is presently before the Ontario Municipal Board.

In addition, I understand that the Township of Woolwich has proposed vertical zoning for several aggregate applications within the Township. I understand that these matters will also find their way to the Ontario Municipal Board for consideration.

Stay tuned.