Ontario Municipal Board
Commission des affaires municipales
de l'Ontario

ISSUE DATE: June 30, 2014 **CASE NO(S).:** MM120034

Referred by:	Ministry of Natural Resources
Objector:	Carol Anderson
Objector:	Elaine Arcand
Objector:	Joseph Arcand
Objector:	Marie Arcand; and others
Applicant:	Denmar Construction & Renovations Ltd.
Subject:	Application for a Class A licence for the removal of aggregate
Legislative Authority:	Subsection 11(5) of the *Aggregate Resources Act,* R.S.O. 1990, c. A.8, as amended
Property Address/Description :	N 1/2 OF Lot 11, Conc. 5
Municipality:	Municipality of West Nipissing
OMB Case No.:	MM120034
OMB File No.:	MM120034

A P P E A R A N C E S :

Parties	**Counsel[+]/Representative**
Denmar Construction & Renovations Ltd.	C. Estrela[+]
Marie Arcand	
Charles Bouvier	
Suzanne Arcand	
James Mohan	
Marianne Carneiro	
Laurent Arcand	
Laura Renaud	
Alain J. Faubert	
Clear Lake Cottagers' Association of Field Inc.	D. Stewart

HEARING EVENT INFORMATION:

Hearing: Held in West Nipissing, Ontario on January 6, 2014

DECISION OF THE BOARD DELIVERED BY M.C. DENHEZ AND ORDER OF THE BOARD

INTRODUCTION

[1] This dispute, under the *Aggregate Resources Act* ("ARA") in the Municipality of West Nipissing ("the Municipality"), began after Denmar Construction & Renovations Ltd. ("the applicant") proposed to change extraction operations at its longstanding sand/gravel pit.

[2] The pit was licenced by the Ministry of Natural Resources ("MNR") as a "Category 1" pit authorized to extract "unconsolidated" (i.e. loose) materials, including below the water table, to a depth about 25 metres (“m”) below grade. In many places, however, it could not go that far, because it hit solid bedrock ("consolidated" materials), which this licence did not authorize it to quarry. So the applicant applied to expand its licenced activities, by adding a "Category 2" licence to its authorisations – namely to *quarry* that rock, including below the water table.

[3] If approved, this change would alter some of its operations, but not others:

- the tonnage that it was licenced to haul would not change;
- nor would the permitted depth of extraction;
- its existing licensing already permitted an asphalt plant and stockpiling;
- the licenced area would be the same (though the permitted workable area would actually decrease);
- the permitted hours of operation would be reduced;

- but controversially, the quarry would introduce drilling, blasting, and crushing of solids from off-site.

[4] Initially, MNR disagreed, but later gave its endorsement after it received further information. The Ministry of the Environment ("MOE") and the Department of Fisheries and Oceans ("DFO") did likewise. The Municipality was unopposed.

[5] However, neighbouring property owners filed Objections, citing concerns about traffic, noise, pollutants (stone dust), and particularly water levels, with related implications for nearby wetlands. MNR referred the matter, under the ARA, to the Ontario Municipal Board ("the Board"). The risk to the wetlands became the main focus of expert debate.

[6] At the Board hearing, the applicant was represented by counsel, with the support of Danny Benson (site plan consultant), Robert Cyr (explosives expert), Dr. Ali Rasoul (hydrogeologist), Rebecca Geauvreau (biologist), David Villard (geologist), and the company's principal, Denis Toulouse. The Board also heard from Luc Rifou (municipal Public Works Manager) and Rémi Labrèche (MNR official), who both testified under summons, at the request of the applicant.

[7] A group of objecting neighbours (Marie Arcand, Charles Bouvier, Suzanne Arcand, James Mohan, Marianne Carneiro, Laurent Arcand, Laura Renaud, and Alain Joseph Faubert) were represented by one of their number, Mr. Bouvier; and they had retained their own hydrogeological expert, Stan Denhoed. Among them, Marie Arcand and Mr. Faubert also testified. The Clear Lake Cottagers' Association of Field Inc. ("the Association") was represented by its president, Derek Stewart. The Board refers to these parties collectively as "the neighbours."

[8] The Board has carefully considered all the evidence, including some two cubic feet of materials, and over 125 pages of written argument, plus authorities. The Board was impressed by the lucidity and eloquence of both sides. In particular, the written arguments on both sides were exemplary, and of much assistance to the Board.

[9] On reflection, the Board finds itself in a position similar to the government

officials: had the project been pursued in its initial form, it might well have been rejected; but supplementary information – and, more importantly, supplementary commitments – address those initial concerns. Indeed, the Board finds that the quarry proposal, as of the end of these proceedings, is fundamentally different from earlier on.

[10] The expert debate was on risk to the wetlands – which are not listed as significant by any level of government. On the contrary, the existing Provincially-approved pit licence already foresees their total destruction on-site. The main argument, by the neighbours' expert, was that the applicant's research was inadequate to guarantee the wetlands' future; he concluded that the change in licensing should hence be refused. The Board was not persuaded of the logic of objecting to a project on the ground that it might bear unidentified risks to something slated for destruction anyway.

[11] The Board also reviewed the statutory criteria, and the ultimate sign-off of each of the responsible public officials, pertaining to related questions like the haul route, water, noise, dust etc. The Board found no compelling evidence to disagree with their findings.

[12] The Board is nonetheless prepared to impose a number of supplementary conditions, beyond those originally anticipated in the lead-up to this hearing. The Board directs the Minister to issue the licence subject to the conditions set out in the draft conditions filed in evidence, plus nineteen additional conditions which the Board sets out at the end of this decision. The details and reasons are outlined below.

CONTEXT

a) The Subject Property

[13] The applicant's property, on Lac Clair Road, is a square covering 67 hectares (“ha”). It abuts uninhabited Crown land to the east, and another licenced pit to the west ("the Ouellette pit”). Ms. Arcand owns 160 ha to the north; as for land to the south, the Board was not told who owns the vacant land immediately abutting the property, but Mr. Faubert's property is a quarter-mile away.

[14] Two dwellings are within 500 m of the site. One is 260 m away, at 657 Lac Clair Road; another is further, at 503 Lac Clair Road. Both were called potential "receptors" of noise. There was no evidence of wells within 500 m of the property.

[15] Topographically, grade on the property was measured at between 243 m above sea level (“m ASL”) and 260 m ASL. The site plans suggested a uniform water table at 251 m ASL, but Mr. Denhoed hypothesized different levels at various points on the site (occasionally as little as 243 m ASL), with a "10 metre elevation difference" between them.

b) The Road

[16] A large curve in Lac Clair Road crosses the northwest corner of the site, leaving a triangle of the applicant's land across the road from the rest of the property. This gravel road is about 15 kilometres (“km”) long, connecting Highway 17 (south) with Highway 64 (north).

[17] Lac Clair Road has been the haul route for decades, as it is for the Ouellette pit. It is also used by a nearby landfill site, and other public and private users. The road has undergone substantial improvements in the last five years, mainly south of the property.

c) The Wetlands and Forests

[18] The property encompassed or straddled four nearby wetlands, referred to as Wetlands 1, 2, 3, and 4. The biologist said that none could be classed as coldwater bodies, fed by groundwater.

- "Wetland 1" straddles the northwest boundary with the Arcand property. It drains northwest, toward Lake Tonnerre.
- "Wetland 2” is entirely on the property, on its eastern side.
- "Wetland 3” is actually a chain of small wetlands straddling the southern boundary.
- "Wetland 4" straddles the western boundary.

[19] There are also three drainage channels on the property. None of the wetlands were listed as significant at a Provincial, regional or local level. This was apparently no accident:

- The biologist testified that she was "confident that there are no fish in Wetland 1," called a treed swamp. Though no fish were identified, the biologist surmised that it might contribute to fish habitat "indirectly."
- She called Wetland 2 "hydrogeologically isolated", with no obvious inlet or outlet (it was said to be created by beavers, and one side was held in by a man-made sand berm).
- Wetland 3 had also been created by beavers; it drained recently, after their dam failed (the biologist now called it a "meadow").
- Wetland 4 was described as including a watercourse 20 centimeters deep, and did contain fish, downstream from the property.

[20] Fish had also been found in an isolated area of man-made “Drainage Channel 1,” though not in the section leading into Wetland 1. They were also found in “Drainage Channel 3”, leading into Wetland 4.

[21] As for the two wetlands created by beavers, no fish were found in Wetland 2; the Board was not advised of Wetland 3, presumably because it was becoming a "meadow."

[22] The biologist testified that the fish habitat on-site was often man-made (inadvertently), and of marginal or low-quality. She recommended measures to stop fish from entering this man-made "low-quality habitat" (so named, because if fish tried to overwinter there, they would die).

[23] A whippoorwill had been heard in nearby forests, and the area was considered potential whippoorwill habitat. That topic was not pursued at the hearing, but the

applicant assured that it was taking all required measures under the *Endangered Species Act*.

d) The Existing Pit

[24] The pit has been there for over 60 years. Its existing licence permits excavation to a depth of 230 m ASL, including below the water table. It also allows the presence of crushing equipment and an asphalt facility.

[25] The existing pit licence foresees a 15 m setback along the perimeter of the property, followed by a 3:1 slope into the extraction area. Otherwise, there is no allowance for the protection of any environmental features on-site. The Board saw illustrations of the eventual expected future, with the extraction area gradually filling with water: the property is slated to become essentially a watery square, crossed by the road, and with a modest setback around the perimeter.

[26] In short, wetlands within the perimeter would be destroyed. The original pit licence also had no provisions for mitigation, or monitoring programs.

THE PROPOSAL

a) Scale and Phasing

[27] This application dates from March 2010. The total licenced area would not change (67 ha); but the extraction area itself would be reduced, from the current licence's permitted 46 ha to a proposed 37 ha.

[28] The main difference would be near the wetlands: as mentioned, the existing pit's extraction area must be set back 15 m from the property line (destroying the wetlands on-site); but under the new proposed licence, extraction would be set back 30 m from Wetlands 1, 3 and 4, i.e. substantially further from the property line.

[29] Also as mentioned, the distinguishing features of this application would be to permit drilling and blasting. This would allow excavation of the bedrock. In its application, the applicant said that, eventually, it would have a maximum depth of 230 m

ASL. This would be the same depth as currently permitted for the pit; but the pit often could not go to that depth, because of the bedrock.

[30] The initial proposal was to divide the overall project into three phases, potentially decades apart:

- Phase 1, east of the road, would cover about 10 ha, toward the centre of the property and to the southeast corner, farthest from the road.
- Phase 2 would cover the balance of the property east of the road. It would be west and north of Phase 1.
- Phase 3 would be in the triangle west of the road.

[31] The applicant's geologist estimated that Phase 1 would generate hundreds of thousands of cubic metres of product above the water table. This is many times what would be expected to be generated in a typical year. In the words of one consultant, "we won't get to the water table for years."

[32] One of the applicant's consultants summarized the excavation sequence as follows:

> The quarry operations will be initiated using a sinking cut in the southwest corner of the primary extraction area (toward the centre of the property). Extraction will then retreat towards the east, producing a slot in the rock in the order of a 30 m wide area. Once operations reach the east corner of the extraction area, the face will be turned such that all further retreat will be to the north and northwest, thereby permitting projection of the blast overpressure for the remainder of the quarry life towards undeveloped lands to the south and southeast.

[33] Another change would be in the scale of the crushing operation. At present, the licence allows crushing on-site, e.g. for boulders; but under the proposal, there would be crushing not only of quarry rock from on-site, but also from elsewhere.

[34] There was some confusion about the likely impact on traffic. In a typical year, this operator now trucks out about 20,000 tonnes. The Board was told that, whether under the status quo or a new licence, there would not be much variation, though an exceptional year might reach 70,000 tonnes, and in an “emergency”, a figure of 100,000

tonnes was hypothesized. However, there were inconsistencies. At one point, counsel for the applicant said that "the maximum truck traffic that may be generated from the site in any year will not increase"; but at another point, he said that "in an average year, the proposed quarry would be expected to result in a doubling of traffic."

[35] But even assuming that the movement of materials increased, the volume of permitted output would not:

> The addition of crushed bedrock… will result in more trucking and processing activities than under the pit licence alone; but the maximum amount of material to be produced on-site, whether imported material that is resold, blended products produced with on-site crushing, or virgin products extracted on-site, will remain the same as the existing pit.

That permitted figure, however, is largely academic, because it is well in excess of the maximum which the applicant said it would truck anyway.

[36] Another source of confusion was that the word "phase" was used differently, in different reports. Sometimes (and more generally), it was used to describe a stage of extraction; but the applicant's hydrogeological consultant also used it to describe different stages of dewatering. There were also different uses for the word "spring" (i.e. whether it meant the season, or an upwelling of water), which appeared to cause confusion on both sides.

[37] This did not make it easy for the neighbours to understand all the implications described. However, the applicant did try to provide some detail on specific areas of concern, notably access, water, noise, and dust.

[38] On the subject of access, the applicant initially said relatively little: it would use the same haul route as always. It provided more information about water, noise, and dust – but much of that description was later overtaken by events, as the applicant changed its proposal (including its phasing plan), apparently in response to what it heard from public authorities and from neighbours. Further detail is provided later.

b) The Water Table

[39] Although the Board was told that it would be “many years before the applicant could reach the water table” (because of all the quarry rock above the water table), the

applicant nonetheless sought a quarry licence below the water table, apparently for two reasons:

- The first was to avoid having to reapply, when time eventually came to work below the water table.

- The second and more immediate reason had to do with a buffer zone above the water table. The licensing system says that if quarrying below the water table were off-limits, so would be a two-metre buffer zone above the water table. To quarry in that buffer zone (still above water), one needs the kind of licence the applicant is seeking here.

- Quarrying within that two-metre zone, in turn, was important to the applicant because it is more efficient to quarry rock when the quarry face has a height of at least 5 m. That would be difficult, unless this licence were obtained.

[40] Parenthetically, when the water table is ultimately reached, there would be two main ways to excavate below it. One is to use drag lines, but the simpler way is to dewater.

[41] Water research, including the question of dewatering, had been conducted mainly by the applicant's hydrogeological expert, Dr. Rasoul. There was a protocol to be followed. Provincial guidelines state that a quarry proposal requires specific information, usually called a "Level 1 report." If that analysis indicates "a potential for adverse effects of the operation on groundwater", then the applicant is expected to further submit a "Level 2 report." In this case, the applicant's consultants filed materials including a 22-page "Natural Environment Level I and 2 Technical Report" (March, 2010), which identified no such potential for adverse effects.

[42] However, according to the applicant's own witnesses, the original materials that went to MNR and DFO were not comprehensive enough: they were "incomplete and insufficient." Officials were not satisfied. This triggered a subsequent round of communications and documentation, including a 40-page "Level I & II Report Addendum" (September, 2011), though none of those documents bore the exact title of

"Level 2 report."

[43] That apparently worked. Government officials then withdrew their objections, and did not call for a further document by the name of "Level 2 report.". Mr. Labrèche, the MNR's Aggregate Specialist, testified that the Ministry had asked for its concerns to be addressed one by one, until it was satisfied. He concluded that MNR's concerns "were resolved and signed off by our specialist."

[44] The consultants' reports appeared guarded concerning assumptions about dewatering. Dr. Rasoul referred to dewatering "*if* excavation of the quarry is to proceed into the saturated zone" [emphasis added]. Nonetheless, he recommended not only a monitoring program for water, but annual review.

[45] He also testified that once active dewatering began, bedrock drawdown would develop slowly. This meant, according to the applicant, "time to monitor those effects, identify any unexpected impacts should they occur, and modify operations as warranted." Dr. Rasoul added that "if off-site impacts are forecast as a result of the annual review, an appropriate remedial action will be developed and operations will be modified as necessary to mitigate adverse impacts."

c) Noise and Dust

[46] The applicant said that it would comply with all Provincial standards. The noise issue was also said to be mitigated by a reduction in the permitted hours of operation: at present, the pit licence authorizes operation 24 hours a day, seven days a week, whereas under the proposal, the operation could function from 7 a.m to 7 p.m, Monday to Friday.

[47] Next, although equipment to "process" excavated bedrock (crushing, screening, stockpiling) would be brought on-site, it was said that this processing would be completed "in a matter of weeks". That equipment would then be removed ("it is not economical to have idle equipment on-site").

[48] The existing pit licence already allows crushing rocks found on-site, and crushing

off-site material. However, there was no denying that the requested quarrying would make more noise, notably in the form of blasting, drilling and additional crushing. There was also no denying that the requested quarrying would increase the frequency of processing activity, and that processing materials from off-site could do likewise. The applicant nonetheless argued that:

> Both the pit and proposed quarry allow material to be brought in and blended…. The noise and dust from those activities are part of the existing condition. Regardless of whether the proposed quarry is approved, processing equipment can be on-site generating noise and dust, but they must comply with the Provincial regulatory limits for noise and dust, just as they will if the proposed quarry is approved.

THE DISPUTE

a) Controversy over the Paper Trail

[49] Mr. Bouvier said he and his neighbours had objected to the proposal since 2010, starting with whether public authorities had received the proper information.

[50] That debate began with elevation figures. The Association argued, for example, that "the poor accuracy with which fundamental parameters such as groundwater elevations and topography are presented to the agency reviewers affects the ability of the reviewers to make appropriate determinations…." A more controversial subject was water, for which the neighbours retained their expert, Mr. Denhoed. He criticized the methodology of the water research, as described later in this decision.

[51] The most controversial aspects of the project were access, water, noise, and dust. Those issues could be summarized as follows.

b) Access

[52] The neighbours said the haul route was already unsafe, particularly north of the site.

[53] Parenthetically, no concerns had been expressed by municipal road officials when they were circulated on the application. Within the last five years, they had

completed improvements to the south. Mr. Rifou, the Public Works Manager, confirmed that they had not raised safety issues, or requested further road improvements or a maintenance agreement.

[54] The south, however, was not the main focus of the neighbours' evidence. Mr. Stewart indicated five areas north of the site where, he said, the road was narrower than the municipal standard.

[55] Counsel for the applicant countered that (a) those areas were still wide enough for two large vehicles to pass; (b) the responsible public authorities had not seen fit to impose restrictions on any vehicles there; and (c) those areas were north of the site, whereas over 95% of traffic to and from the pit was on roads to the south anyway.

[56] Be that as it may, Mr. Rifou promised that road authorities would look into those five areas with Mr. Stewart, identified on the aerial photo as points 5, 13, 22A, 22B, and 22C.

[57] The neighbours said, however, that such promises did not go far enough. The Association proposed that the Board consider a two-pronged approach to roads, distinguishing between routes south and north of the site:

- To the south, "it would be reasonable to include a condition limiting the haulage route to that portion of Lac Clair Road from the pit entrance south to Hwy. 17."

- As for the north, where the Association's concerns about road conditions were mainly focused, that stretch of road would be not only excluded from the haul route, but also "the Board may decide to refer issues relating to the repair or upgrade of this roadway back to the Municipality."

c) Water

[58] As mentioned, no document entitled “Hydrogeological Level 2” was received by MNR. The Association concluded that "the application for a Class A Category 2 quarry below the water table licence is not supported by the required Level I or Level II

Hydrogeological Study. The Ministry of Natural Resources did not follow the Provincial Standards for the application of the Class A, Category 2 licence and therefore the potential impacts of quarrying are not clearly understood…."

[59] The neighbours' own hydrogeological expert, Mr. Denhoed, took a similar view. Aside from his methodological reservations, he expressed specific concern that:

> dewatering the quarry to an elevation of 230 m ASL will result in creating drawdown in the water table beneath the Arcand property, resulting in a significant impact to the existing wetland…. The proposed quarry will have significant impact to Wetland 1, on property owned by the Arcand family, and the quarry should not be allowed to proceed.

[60] Aside from the risks of dewatering, said the neighbours, there might be the reverse problem of overflow. Mr. Faubert, for example, expressed concern that if there were overflow from Wetlands 3 or 4, it would be in his direction. The biologist replied that no discharge from the site could occur without a Provincial permit.

[61] The Association also challenged the adequacy of hydrogeological information, on which agencies had signed off:

> Provincial Standards under the ARA in relation to Hydrological Level 2 technical reports list 14 items that must be addressed in the report submitted by the applicant. The reports submitted on behalf of Denmar Construction and Renovation do not address the items listed and do not provide the Minister or Board with the information upon which to consider issuance of a licence under the ARA….

[62] The government officials and the applicant's consultants, particularly the biologist, denied that assertion.

d) Noise

[63] The neighbours expressed concern about noise from the proposed blasting, drilling, and additional crushing. The applicant replied that it would comply with all relevant Provincial standards.

[64] Those standards also require a further detailed noise study, before excavation or processing are undertaken within 500 m of sensitive receptors (notably dwellings). The applicant said that only when operations proceeded to Phase 3 (west of the road) would

they be within 500 m of a dwelling. That was "several decades in the future."

[65] For that matter, said the applicant, the crushing equipment was already allowed to operate throughout the site under the existing pit licence, and was already required to meet all applicable Provincial noise guidelines.

e) Dust

[66] The neighbours, particularly Ms. Arcand, expressed apprehensions about stone dust, which might make its way through the air and water. The applicant responded that the licence would be subject to the following, at ss. 3.1-3.3 of the draft conditions:

> 3.1 Dust will be mitigated on-site.
>
> 3.2 Water or another Provincially approved dust suppressant will be applied to internal whole roads and processing areas as often as required to mitigate dust.
>
> 3.3 Processing equipment will be equipped with dust suppressant or collection devices, where the equipment creates dust and is being operated within 300 metres of the sensitive receptor.

f) Other Environmental and Cumulative Aspects

[67] The applicant concluded that "the reduced extraction area, recommended mitigation and monitoring, and agreed-to progressive rehabilitation measures around Wetland 1 will actually reduce the impact of the existing pit."

[68] The neighbours were unconvinced, particularly on the subject of cumulative impact. Ms. Arcand, for example, said she owns seven chalets, six of which are for rental; her apprehension was that stone dust could spread across the area, and that noise would "destroy our peace and tranquility", and frighten off animals. She added that her chalets are rented to people seeking fresh air and tranquility – all of which were threatened by this proposal.

[69] The Association, for its part, argued that it had to consider the long term, and that the proposed licence could prolong an existing undesirable situation:

> The pit life will be exhausted and extraction will have to cease once all of the unconsolidated material has been removed. A quarry licence extends production life and the potential for adverse effects.

TRANSFORMATIONS IN THE PROPOSAL

[70] On the eve of the hearing and during the hearing itself, the applicant advanced a series of changes to its project and addenda to its proposed conditions.

[71] The largest change was a revised phasing plan, splitting “Phase 1" into "Phase 1A" and "Phase 1B". For the very first phase ("Phase 1A"), the depth would be 15 m shallower than initially proposed.

[72] This revised phase 1A would also be confined to the eastern part of the lot, closest to the Crown land, and farthest from the neighbours, to a maximum width of 375 m.

[73] The floor of the quarry, now to be at 245 m ASL in “Phase 1A”, would still be below the water table, according to the applicant's projections (but not necessarily so by Mr. Denhoed’s own hypothesis, which supposed a water table occasionally as low as 243 m ASL). Even assuming that the excavation was uniformly below the water table, it would be to a much lesser extent than originally described.

[74] Next, the applicant undertook not to move out of this "Phase 1A" without a new hydrogeological report, to the satisfaction of MNR and MOE.

[75] The area closest to the neighbours ("Phase 3") would not only be undertaken last; it would also be to a shallower depth (250 m ASL).

[76] The applicant also offered the following:

- a new gate facility (including a second entrance), to reduce traffic hazards at the entrance to the property;
- improved sightlines around the access to the property;

- the possibility of relocating Lac Clair Road, in consultation with the Municipality, so as to eliminate the large curve near the entrance;
- an improved low-permeability barrier to protect Wetland 1;
- rehabilitation of the extraction face, near Wetland 1, as soon as the unconsolidated material was removed, so as to line it with low permeability material;
- preventing the municipal ditch from discharging into the extraction area;
- locating crushing equipment on-site only for "a period of weeks" per year;
- whereas the existing pit licence allows an asphalt plant at any time, the proposed licence would permit it only "in connection with a contract for a public authority"; and
- protecting vegetation generally, until the last possible moment before excavation.

[77] These addenda did not change the neighbours' position. Mr. Bouvier added that these addenda merely "attempted to address identified deficiencies in the applicant's case (rather) than any type of concession."

CRITERIA

[78] Pursuant to s. 11(8) of the ARA, the Board may direct the Minister of Natural Resources to issue the requested licence, subject to certain obligatory conditions, and to any other conditions recommended by the Board. The Board may alternatively direct the Minister to refuse to issue the requested licence. The Minister has supplementary powers, notably under ss. 11 and 13. The ARA directs all concerned to have regard to criteria at s. 12(1):

> in considering whether a licence should be issued or refused, the Minister or the Board, as the case may be, shall have regard to,
>
> (a) The effect of the operation of the pit or quarry on the environment;

(b) The effect of the operation of the pit or quarry on nearby communities;

(c) Any comments provided by a municipality in which the site is located;

(d) The suitability of the progressive rehabilitation and final rehabilitation plans for the site;

(e) Any possible effects on ground and surface water resources;

(f) Any possible effects of the operation of the pit or quarry on agricultural resources;

(g) Any planning and land-use considerations;

(h) The main haulage routes and proposed truck traffic to and from the site;

(i) The applicant's history of compliance with this Act and the regulations, if a licence or permit has previously been issued to the applicant under this Act or a predecessor of this Act; and

(j) Such other matters as are considered appropriate.

[79] However, matters do not end with the statute. When a licence is issued, certain conditions are attached automatically. These are called "prescribed conditions", under s. 7(1) of Ontario Regulation 244/97, which one MNR publication[1] described as follows:

> The prescribed conditions are conditions that pertain to the individual category and cannot be varied or rescinded by either the Minister or the Ontario Municipal Board.

[80] In addition to the requirements of the ARA and the above regulation, a licencee must also comply with the requirements of all other applicable statutes and regulations. Another MNR publication[2], the *Aggregate Resources Program Policies and Procedures Manual* ("the Manual"), summarizes:

> The issuance of a licence does not preclude the licencee from meeting the requirements of, or obtaining approval under, other statutes or regulations. For example, the licencee must still obtain approval under the *Lakes and Rivers Improvement Act* for the diversion of a water body; the minimum noise requirements of the Ministry of the Environment (MOE) under the *Environmental Protection Act;* and/or meet the safety standards of the Ministry of Labour (MOL) under the *Occupational Health and Safety Act*.
>
> A licence that is subject to the Prescribed Conditions, makes reference to requirements/approvals (e.g. Certificate of Approval, now Called "Environmental Compliance Approval")….

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[1] *Introduction to Category 2 Licence, Aggregate Resources of Ontario Provincial Standards* v 1.0.
[2] *Aggregate Resources Program Policies and Procedures Manual,* Policy 2.0 0.3-Licence Conditions/Site Plan Notes.

[81] For example, the *Ontario Water Resources Act* requires, at s. 34(3), a permit whenever someone takes more than 50,000 litres of water per day. Inversely, it also calls for Environmental Compliance Approval (formerly a Certificate of Approval) to construct and operate a water discharge system.

[82] Such requirements, stemming from those other statutes, and/or from the "prescribed conditions", include the following:

- water could be neither taken nor discharged from the site without a specific Provincial permit;
- dust would be mitigated on-site;
- processing equipment would require a Provincial permit (Environmental Compliance Approval), and be equipped with dust suppression devices;
- no extraction or processing operation could move within 500 m of a dwelling (including all of Phase 3), without a further noise assessment report;
- noise would need to comply with Provincial standards; and
- blasting would also be subject to Provincial standards.

[83] In addition, further site-specific conditions may be attached to the licence (or to the site plan) by the Minister or by the Board. As stated by MNR [3],

> On a site-by-site basis, additional conditions can be attached to the licence for site plan at the discretion of the Board or Minister, however, these conditions do not form part of the prescribed conditions.

[84] In this application, the applicant had anticipated such site-specific conditions. The following are examples:

- whereas the existing pit licence foresaw that Wetlands 1, 3 and 4 on-site would be eliminated altogether (to within 15 m of the property line), the

[3] *Introduction to Category 2 Licence, op. cit.*

proposal would retain them, add a 30 m buffer, and in the case of Wetland 1, build a berm.

- there would be a water monitoring program;
- dust collectors would also be attached to rock drills; and
- the permitted hours of operation would be reduced.

[85] Once a licence is issued, s. 15 of the ARA requires compliance with the licence, the site plans associated with that licence, the ARA, and any regulations passed under the ARA. The other statutes are also applicable.

ANALYSIS

a) Preliminary Observations

[86] Three general observations underpin this decision.

[87] First, this appeal is not about a new aggregates operation. It is about a change to an existing operation. In evaluating whether the application meets statutory criteria, the Board must be mindful of the difference between:

- what would occur if the new licence were issued,
- as compared to what would occur if it were not – i.e., if extraction continued simply under the old pit licence.

[88] Next, the Board is aware that, at the end of the day, there were no remaining apprehensions, on the part of the government officials with the most expertise in this area – MNR, MOE, and DFO – nor was there apparent concern on the part of the officials most directly affected, namely at the Municipality.

[89] Finally, the proposed terms for this project have been in constant evolution, from its inception up to and including the Board hearing. At the outset, supporting materials were too "incomplete" for government approval; but that problem was addressed, through iterative communications – and project changes – until those authorities were

satisfied. That iterative pattern did not stop: right to the last day of the hearing, new arrangements were being advanced, professedly in response to concerns raised by the other side.

[90] This was arguably disorienting for the neighbours: they did not have a fixed target. The Board, however, must adjudicate what it has before it. The neighbours also have the satisfaction of knowing that, at a minimum, some aspects of the proposal have been clarified – and others have actually changed. In particular, new conditions for the project entered the equation – virtually every day of the hearing – and many of them dealt specifically with the topic for which the neighbours had prepared most of their evidence (and all of their expert evidence), namely water. The Board does not find that the neighbours were significantly disadvantaged by these changes in the applicant's position because the neighbours had the benefit of their expert's advice throughout the hearing to comment on those changes.

[91] Certain other topics did not figure as highly in the Board's deliberations. One item which neighbours put on the Issues List for this hearing was the concern that this project would reduce property values. The Board's practice has been to consider that question as a symptom of a problem, more than as a problem itself: the Board's interest is in the underlying cause, more than in the monetary effect.

[92] Another stated concern of the objectors was "MNR's failure to conduct inspection in a timely manner and lacking resources to address complaints." However, the Board heard no significant evidence to corroborate that proposition.

[93] The Board will now turn to the specific concerns about access, water, noise, dust, and the environment generally.

b) Access

[94] There was much discussion of curves in Lac Clair Road, near the subject property. There was a shared hope that someday, the road would be straightened. The applicant said its proposed site plan had left open that possibility.

[95] Although the Municipality was not a party to these proceedings, the Board was also encouraged by the statements of its Public Works Manager, indicating interest in improvements, particularly at points identified on aerial maps as 5, 13, 22A, 22B, and 22C, all north of the property. The Board also notes the commitment, by the applicant, to improve the site entrance, as depicted on the proposed site plan.

[96] That leaves the immediate question of the adequacy of the haul route, for the purposes of the proposed new licence. Although there were inconsistencies in the evidence, the Board will assume that there would indeed be an increase in the road traffic, possibly a substantial one. However, there was no denying that the overwhelming majority of trips would be on the recently-improved stretch of road south of the property, away from points 5, 13, 22A, 22B, and 22C. Furthermore, the Board was shown no evidence that road authorities, with knowledge of and responsibility for that subject, discerned a significantly increased risk to public safety; the testimony of Mr. Rifou was unequivocal in that regard. By the same token, the Board was not shown compelling evidence that those authorities were mistaken in that view.

[97] The same reasoning applies to the related question raised by neighbours, namely whether the project would trigger the requirement for road upgrades – thereby imposing costs on taxpayers. There was simply no evidence to corroborate that apprehension.

[98] In short, the Board was not persuaded that the proposed change in licensing should be refused, on the ground of incremental risks on the haul route.

c) Water

[99] Water was by far the most disputed issue in this hearing, in three respects:

- first, there was the question of the water table, and whether the proposed change in operations would decrease water levels, to the detriment of the wetlands. That question is where the debate among experts was most vigorously engaged.

- There was also the inverse question of increases in water levels, which could cause problems for owners downstream, like Mr. Faubert; they could also flood nearby wetlands.

- Another issue was the quality of drinking water.

[100] The Board will address the quantitative questions of too little (or too much) water later. At the outset, however, it is possible to put aside the third (qualitative) question pertaining to drinking water. There was no evidence of nearby wells at risk. The applicant's environmental consultant concluded that there were no wells obtaining water from the bedrock affected by the project, and this was not seriously rebutted. Ms. Arcand's water supply, for example, does not now rely on either wells or lake water, but on bottled water; and Mr. Faubert's well, some distance from the site, was said to be some ten times deeper than the proposed quarry.

[101] The only other question pertaining to water quality was Ms. Arcand's apprehension of contamination by stone dust. The Board will return to the subject of dust in a separate section later. The Board finds no grounds to challenge the project based on water quality; but water quantity, as it pertained to water levels, was a more complex issue.

[102] Dewatering was already permitted under the existing pit licence; however, physical realities indicated that it would be more of an issue for a quarry. The main focus of dispute was the knowledge base. Each side accused the other of "a fundamental misunderstanding regarding the amount of water entering the site, its management, and the timing of discharge."

[103] The neighbours' expert, Mr. Denhoed, criticized the methodology of the applicant's consultants, and some of the government officials. His concerns ranged from the measurement of topography and the identification of rock types (e.g. Paleozoic versus Pre-Cambrian), to the calculation of water levels, and their effect on nearby wetlands. There were discussions of drawdowns, ditches, transmitivity and storeativity. Mr. Denhoed and the neighbours placed particular emphasis on the proposition that there should have been a "Level 2" hydrogeological report, and no report by that name

was in the paper trail. Mr. Denhoed concluded that there was a need for more study of the hydrogeology, and that there were "too many unknowns" for the licence to be granted.

[104] In the Board's view, the important point is not the title of the research, but its contents. The biologist asserted that the assembled environmental evidence – which was presented to government officials in successive presentations – was cumulatively consistent with a Level 2 study, whether or not it was labeled as such.

[105] In this iterative process, the key question was whether any supposed gaps were so significant that responsible officials would underestimate the risks, notably any pivotal area of research,

- which would have been done elsewhere,
- but was not done here, by any of the many professionals on the file.

[106] On review, the Board has found no immediate shortfall of information for present purposes, and reaches that conclusion for several reasons, outlined below.

[107] One factor is that the proposal changed, to incorporate more checks and balances than it had before. For example, the neighbours' expert, Mr. Denhoed, had predicated his calculations and opinion on two apparent assumptions:

- In accordance with the then site plans, he had assumed a standard quarry depth of 230 m ASL, well below the water table.
- Next, his witness statement and testimony addressed work beneath the water table, as if it were to occur imminently.

[108] Those two assumptions, however, must be revisited in light of several events at the hearing. First, under the applicant’s revised phasing plan, that first "Phase 1A” would not only be confined to the eastern part of the site, closest to the Crown land, and farthest from the neighbours; its depth would also be 15 m shallower than first

proposed.

[109] The quarry floor, at 245 m ASL, would still be below the water table, according to the applicant's projections (but not necessarily so by Mr. Denhoed's own hypothesis, which supposed a water table sometimes as low as 243 m ASL). Even assuming that the excavation was uniformly below the water table, it would be to a much lesser extent than originally described.

[110] Second, there is a substantial amount of product above the water table. The current impetus to obtain a licence below the water table, said the applicant, is not to launch immediate excavations there – for the obvious reason that they are expensive. The more immediate purpose is to get into the two-metre buffer area. The sworn expert testimony was that the area physically below the water would not be reached for "years", and the Board was shown no contradictory evidence.

[111] Finally, the applicant undertook not to move out of this "Phase 1A" without a *new* hydrogeological report (to the satisfaction of MNR and MOE), specifically to address that information base further.

[112] Obviously, the above does not disprove any potential impact to the wetlands. However, there are two further factors to consider.

[113] One is that the fate of the wetlands had already been decided years ago. The pit would have essentially destroyed everything on the property. In contrast, under this proposal, the three largest wetlands are essentially retained (subject to the fact that one of the beaver-created wetlands is already transforming itself back into a "meadow" naturally).

[114] Mr. Denhoed and the neighbours argued that not enough was either known or had been done, to guarantee the future of those wetlands. For example, he said the berm idea, to contain water, "doesn't look effective." There was also discussion of ditches, and other details. The applicant replied that, in any analysis of disturbance of the wetlands – *compared* to what is anticipated under the status quo – this proposal comes out ahead. For example, "if the proposed quarry is approved, it will actually

improve the condition for Wetland 1, by ending further extraction within that wetland and implementing measures to reduce water seepage." Compared to a watery square, the Board is compelled to agree.

[115] There is a further factor, and that is the legal status of the wetlands – or their lack of it. Granted, wetlands are an acknowledged component of the Provincial Policy Statement 2005, applicable to all planning matters at the time of this case (PPS). PPS planning policies on Natural Heritage, however, refer specifically to "significant" wetlands – defined as areas "identified as potentially significant by the Ontario Ministry of Natural Resources". For PPS purposes, an area is not considered a Provincially Significant Wetland (PSW) unless it has been so identified by MNR. In this case, these wetlands were not recognized as significant at *any* level – Provincial, regional, or local. The Board heard no hint, from anyone, of any lack of unanimity among the professionals on that point.

[116] The above leads the Board to the following overall conclusion. The Board has considered both the proposed project, and the existing documents governing the wetlands and their future. It has no evidence on which to suppose that the research invested was anything less than commensurate with the significance of the matter at hand.

d) The Risk of Too Much Water

[117] The inverse question was that of potential overflow. That apprehension was premised on water accumulating in the extraction area (or in holding ponds), and needing to be discharged.

[118] Dr. Rasoul testified that, hydrogeologically, there would be ample time, before off-site discharge was required. Indeed, he concluded that specific off-site discharge systems were not currently warranted. He concluded that there would be no risk to neighbouring owners – unless there was a water discharge from the subject property – which would be illegal, without a Provincial permit.

[119] For good measure, he proposed conditions to specify that "if water discharge is

of sufficient quantity to require holding (and) should a water discharge system be required, the design and operation of that system, including discharge locations, water quality, and quantity/timing of discharge, will be subject to approval by the Ministry of Environment."

[120] Some neighbours appeared not to attach much credence to either

- the conditions,
- or the Provincial standards and permit system.

[121] Ms. Arcand expressed concerns about what recourse she would have, in the event of non-compliance (both in the case of water and dust), and she expressed skepticism about enforcement:

> I am aware that Denmar has complied with… government standards and obtained the required certificates. However, should his proposed methods and techniques fail, we have very little recourse except filing a formal complaint to MNR…. If the proposed Denmar quarry is accepted, I am concerned that there will be compliance issues…. With their lack of resources, will MNR fulfill its mandate?

[122] The Board does not accept that argument. As a presumption of law, the Board cannot start from the premise that (a) people will break the law, and (b) Provincial agencies will fail to enforce the law. Furthermore, as mentioned at the hearing, "a formal complaint to MNR" is not the only recourse. The longstanding principle, from the case of *Rylands v. Fletcher*, [1868] U.K.H.L. 1, is that when water escapes from “property A" to “property B", the owner of “property A" is responsible for damages. That legal reality remains unchanged. Nothing in these proceedings authorizes the Applicants to discharge water onto the Neighbours’ property in a way that damages the latter, nor do these proceedings relieve the applicant of any liability which might result.

e) Noise

[123] As mentioned, noise is a recognized contaminant under the *Environmental Protection Act*. As such, it is subject to provisions prohibiting adverse discharges (s. 14) and requiring that equipment obtain an Environmental Compliance Approval (s. 9).

[124] Current MOE noise guidelines are published in a document entitled *NPC-300 Environmental Noise Guidelines Stationary and Transportation Sources – Approval and Planning* ("NPC-300"). It says that if noise levels comply with the specified limits, adverse effects will be minimized:

> The limits in Part B and Part C of this guideline have been designed based on the principle that sound levels complying with the limits minimize the potential for adverse effects from noise.

[125] Under NPC-300, the site would appear to be listed as a Class III (rural) area, though certain locations may potentially be Class II (mixed), if urban-type noises (notably traffic) predominate during daytime hours. The maximum daytime sound permitted from equipment, during operating hours, is usually 45 decibels (in a Class III area) at the point of reception; or if the point of reception is in in an area with urban noises, it would usually be 50 decibels during the daytime.

[126] The Board was not shown how there would be any compromise of the relevant Provincial standards. The applicant's experts testified that its equipment was already operated under a Certificate of Approval (now called Environmental Compliance Approval), which it cannot obtain unless it complies with Provincial guidelines. All blasting must also comply with MOE Guideline NPC-119, including ground vibration and overpressure.

[127] There are also the proposed conditions. The quarrying operation itself would be staged to minimize noise: the processing equipment would be aligned behind the quarry face, intended to shield sensitive receptors from that equipment, and direct noise toward the uninhabited land to the east. Blasting could not occur until one hour after opening time in the morning, and would be required to stop at least one hour before closing time in the evening. The applicant's explosives expert also recommended a monitoring program, including two seismographs, to be reviewed by an independent firm.

[128] In particular, for the area closest to neighbours (Phase 3, west of the road), a further noise impact analysis would be a precondition to any extraction activities to be undertaken there.

[129] On review, the Board found no significant evidence of any shortcomings, in terms of the compliance of the above measures with appropriate standards.

f) Dust

[130] Dust can also be a contaminant under the *Environmental Protection Act*, s. 14. By law, the discharge of such a contaminant is not permitted to have an adverse effect.

[131] Again, however, it is a matter which is already regulated. The applicant is legally required to control dust on-site. This includes spraying internal roads with water; processing and screening plants are required to comply with Provincial regulations, and to be equipped with dust collection and suppression equipment, to comply with Provincial requirements. Counsel for the applicant argued that the intent was to "ensure that dust generated on-site remains on-site, and within levels that do not result in an adverse effect or nuisance to nearby land owners or impairment of the natural environment."

[132] Those obligations are the same as what is binding on the operation now. However, since drilling and blasting were not part of the existing licence, the applicant's blasting consultant made further recommendations, which were incorporated in the site plan.

[133] The biologist added that as long as dust mitigation was in accordance with MOE standards, she was "not concerned" with any likely risk of environmental impacts.

[134] As in the case of noise, the Board found no significant evidence of any shortcomings, in terms of the compliance of the above measures with appropriate standards.

CONCLUSION

[135] Subject to the proper conditions, the Board has not found that this project would digress from the criteria in the ARA.

[136] The Board has carefully considered the evidence and arguments, of the objecting

neighbours, on the various issues. In particular, the treatment of wetlands is an important issue. Parenthetically, the Board believes that the neighbours were helpful to the public interest, in drawing attention to various concerns. The Board also believes, however, that with the changes to the proposal and new conditions, those concerns are being addressed – perhaps not to the full satisfaction of the neighbours, but in compliance with applicable standards.

[137] There was no denying that the proposal would change the character of the work, and the disturbance to the landscape. However, the applicant's environmental consultants proposed a mitigation plan, which was accepted by MNR and was incorporated in the site plan conditions. Indeed, the geologist opined that, when compared to the terms of the existing licence, the proposed new arrangement involved "much less disturbance" to the landscape. The Board is compelled to agree.

[138] As mentioned, the municipality was not a party to these proceedings. The Board was nonetheless impressed by the interest shown by its Public Works Manager in the future of Lac Clair Road. The Board trusts that the Municipality will use its best efforts to make improvements where the route has shortcomings, and consider straightening the road where appropriate.

ORDER

1. The Minister is directed to Issue the Category 2 “Class A” Licence under the *Aggregate Resources Act*, subject to the prescribed conditions, and to the conditions already tentatively approved by the Minister.

2. In addition to the above conditions, the Board directs the following conditions:

   The Board provides the following conditions pertaining to operations:

PHASING

a) The proposed Operational Plan, at page 2 of 3, shall divide Phase 1 into Phase 1A and 1B.

b) The phase line between Phase 1A and Phase 1B shall be 375 m west of the eastern extraction limit.

c) Note 1.2.1, Sequence and Direction of the Quarry Development, shall be revised by deleting the phrase:

> Extraction will continue as indicated in Phases 1 and 2 through to the limit of extraction

And replacing it with the following two phrases:

> Extraction will continue as indicated in Phases 1A, 1B and 2 through to the limit of extraction. The maximum depth of extraction of Phase 1A shall not exceed 245 m ASL.
>
> Quarry extraction shall not proceed beyond Phase 1A, until such time as a hydrogeological report on that subject, acceptable to the Ministry of Natural Resources in consultation with the Ministry of Environment, has been completed.

d) The depth of extraction at Phase 3 will be reduced. The Operational Plan, at page 2 of 3 (Note 1.2.1 – Sequence of the Quarry Development) shall be amended by adding:

The maximum depth of extraction at Phase 3 is 250 m ASL.

e) The spot elevation shown for Phase 3 on the Operational Plan, at page 2 of 3, shall be amended from 230 m ASL to 250 m ASL.

f) The final rehabilitation contours shall be revised to reflect the new maximum depth of extraction.

BLASTING

g) The Operational Plan, at page 2 of 3 (Note 1.2.1 – Sequence of the Quarry Development) shall be revised to insert the following:

Prior to any blast, the top elevation of the bedrock shall be confirmed.

h) The Operational Plan, at page 2 of 3 (Note 1.2.27) shall be amended by adding the following note, under the heading Blast Design Report:

All blasts shall conform to requirements for ground vibration and overpressure as stipulated in MOE guideline NPC-119, as amended or replaced.

i) Seismographic readings will be taken for blasts, and reviewed periodically by an independent professional.

ENTRANCE

j) Pages 1, 2 and 3 of the site plans shall be revised, to add a gate and entrance in the vicinity of the area demarcated as “BH-1”.

k) The Operational Plan, at page 2 of 3 (Note 1.2.5) is revised, by inserting the following:

> A second entrance to the east of the municipal road allowance (as shown on the plan) shall be developed for vehicles entering from or exiting to the north. Municipal approval will be required before the entrance can be developed and its location finalized.

l) The Operational Plan, at page 2 of 3 (Note 1.2.5) is revised, by inserting the following:

> The operator shall, in consultation with the Municipality, clear/cut vegetation in Phases 1 and 3 and the setback to the municipal road allowance, to improve sightlines to and from the entrances.

WATER

m) There shall be a monitoring program, whereby the monitoring data shall be reviewed annually by a qualified professional, to assess the effect of operations on water. If warranted, impact predictions shall be updated, based on the results of the monitoring program. The licencee shall make all necessary modifications to the quarry operations to prevent any environmental effects on the quality of water.

n) The extraction boundary adjacent to the northwest wetland shall be highlighted as an area to which the following note applies. The Operational Plan, at page 2 of 3, and the Rehabilitation Plan, at page 3 of 3 are both revised, by inserting the following note:

> After extraction of unconsolidated material has been completed, to the limit of extraction adjacent to the northwest wetland, the operator shall promptly complete progressive rehabilitation of the pit face. Progressive rehabilitation shall incorporate a minimum of 1 metre of compacted low permeability material (measured horizontally) to limit the movement of groundwater from the unconsolidated material beneath the wetland into the extraction area. The amount and nature of the low permeability material shall be to the satisfaction of the Ministry of Natural Resources.

o) The applicant will keep the municipal ditch from discharging into the extraction area.

p) The applicant shall provide a berm to control surface water running out of the wetland or weeping from organic soils.

MISCELLANEOUS

q) The contours on the site plans shall be updated by a surveyor qualified to practice in the Province of Ontario.

r) The Operational Plan, at page 2 of 3, Note 1.2.27, shall delete the

following phrase:

> Vegetation clearing and grubbing shall occur no more than 1 operating year before an area is to be excavated

And replace it with the following phrase:

> Vegetation clearing and grubbing shall occur no more than 1 operating year before an area is to be excavated and as close to the excavation date as possible considering other environmental time constraints

The rest of that Note pertaining to vegetation clearing remains unchanged.

s) The final rehabilitation plan for Phase 3 will be revised, to change the reference from "Waterbody Segment" to "Forested Areas."

"M. C. DENHEZ"

M. C. DENHEZ
MEMBER