THE PROPOSED ONTARIO AGGREGATES ACT: DISCUSSION, EVALUATION AND RECOMMENDATIONS

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EDITOR'S FOREWORD

The Centre for Resource Studies is pleased to present another in its series of papers on current issues in mineral resource policy.

On June 14, 1979, the Government of Ontario introduced the Aggregates Act to the Ontario Legislature, and requested input from the public at large on the proposed bill. The potential environmental impact of aggregate extraction has been a concern of members of the Canadian Environmental Law Research Foundation (CELRF) for some time, and they have prepared this study as a contribution to the analysis and discussion of this important legislation.

This paper represents the results of independent research sponsored by the Centre for Resource Studies. The Centre wishes to express its appreciation to the CELRF for its prompt and efficient preparation of this manuscript, which is offered for information, discussion, and debate. Views presented are those of the authors, and do not necessarily represent the views of the Centre nor of its sponsors.

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SUMMARY

Sound, viable mineral aggregate resource management policies must be based on legislation that takes into account the need to minimize adverse social and environmental impacts, protection of features of significant natural, architectural, historical or archeological interest, and the conservation of aggregates which are a nonrenewable resource. Legislation to manage Ontario's mineral aggregate resources should provide for a thorough consideration of all relevant issues before licensing of gravel pits and sand quarries. It should provide for public participation in the process of licensing, monitoring, and review; for adequate enforcement mechanisms, for rehabilitation of the completed sites; and for adequate provision for rehabilitation of sites abandoned both before and after the establishment of a comprehensive legislative regime.

Recent studies of Ontario's legislation, practices, and policies governing pits and quarries, however, have indicated that conflicts between society's need to extract and transport mineral aggregates expeditiously and at reasonable cost, the need to preserve natural areas in highly urbanized parts of Ontario, and the rights and the amenities of neighbouring communities, have not always been resolved satisfactorily. These studies have led the Ontario government to propose new legislation intended to improve the management of the aggregate resources of the province and the rehabilitation of land from which the aggregates have been excavated.

This study will discuss the current Ontario legislation that applies to the establishment, operation, and rehabilitation of pits and quarries, and the weaknesses that experience has revealed. The proposed Aggregates Act and policies for the management of Ontario's mineral aggregate resources and regulation of the operation of pits and quarries will be discussed and evaluated. Finally, legislative reforms will be recommended to enhance and promote an environmental protection ethic during all phases of the securing, management and decommissioning of sites for extraction of aggregates.

CONTENTS

INTRODUCTION: THE SOCIAL AND ENVIRONMENTAL IMPACTS OF AGGREGATE EXTRACTION

A reliable, steady supply of aggregates is necessary to the provincial economy. Aggregate is vital to virtually all types of construction. Road construction, improvement, and maintenance utilize about 50 percent of the aggregate extracted; 30 percent is used for other major construction projects such as waterworks, sewage systems, and electric power installations; 17 percent is used for nonresidential building construction; and 3 percent for residential building. The demand for aggregates has been growing although recent economic and population trends may have caused it to level off.[1] In 1970, 13 tons of sand and gravel were extracted in Ontario for every person living in the province. By 1975, the amount had increased to 15.5 tons for every person.

To meet the need for aggregates, new pits and quarries will have to be opened and operated from time to time. However, the manner of operation, the location, and the lack of rehabilitation of pits and quarries have made them a frequent and vexing source of conflicts between ratepayers' groups and aggregate producers, between municipal councils and the provincial government, and between both levels of government and their constituents.

The largest single expense in producing aggregate is the cost of transportation. As a result, the most economically viable pits and quarries are those closest to their markets. Almost all the gravel mined in Ontario is extracted from highly urbanized areas containing about one quarter of Canada's population and most of Ontario's Class I, II and III farmland. In these areas the likelihood of conflicts with residential and commercial amenities is highest, and the need to extract aggregates is most likely to conflict with the need to preserve remnant natural areas, open space for recreation, and agricultural land.

Were operators required to internalize environmental costs, and were the cost of diesel fuel to rise, as seems likely, to levels that make long-haul transportation of aggregates by rail or water more competitive, operators would probably establish pits in more remote areas of the province. Until these conditions apply, it can be anticipated that pressure to allow further pit and quarry development in the present areas of extraction will continue. Moreover, as mining companies have already acquired property in these urban areas that they have not yet used, they are likely to look to their own holdings for future expansion before purchasing

land further afield. In any event, unless legislation and policies require operators to bear the full environmental costs and unless adequate environmental protection measures are incorporated into the decision-making process, moving operations to more remote areas of the province would bring southern Ontario's environmental problems to these areas.

While some expansion of the aggregate industry in urban areas may be inevitable, it is necessary to recognize the increased environmental degradation and social disruption that the industry will cause unless properly regulated. Pits and quarries generate noise and dust which affect neighbouring residents along truck routes. Abandoned pits and quarries which have not been properly graded and landscaped are a safety hazard. When filled with water, unrehabilitated sites have resulted in drownings.[2]

Excavation and blasting may damage water tables and wells in the area. Normally, pits and quarries are "dry" operations, from which contaminated effluents do not drain into water courses. However, recent governmental studies in Ontario indicate that pit and quarry operations can be sources of both surface and groundwater pollution.[3] Provincial agency field experience has been that such operations may also create problems of erosion, runoff and sedimentation, although most do not.[4]

Extractive operations also necessitate the removal of topsoil. Whether this topsoil removal is a temporary or a permanent loss when associated with extractive activities depends on the adequacy of steps taken to stockpile topsoil during operations and rehabilitation activities. Ministry of the Environment offices have indicated that silty runoff has been known to enter watercourses from the extractive operations where stripped or overburden materials have been improperly moved and have become susceptible to erosion.[5]

After operations cease, inadequate rehabilitation may lead to further water pollution problems, depending on the location of the pit or quarry and factors such as slope, amount of rainfall, topography and soils. In the Regional Municipality of Sudbury, abandoned or unreclaimed quarries have created erosion in local lakes and streams.[6] The method of rehabilitation can also result in social and environmental impact if it causes pollution or is incompatible with surrounding land uses. For example, a favoured method of rehabilitating pits and quarries is to fill them with garbage. This may extend the duration of a nuisance, as garbage dumps and sanitary landfill sites are frequently sources of surface and

groundwater contamination, odour, attraction of unwanted birds, insects and rodents, gas migration, noise, and truck traffic. Methods of engineering these sites to prevent groundwater pollution, such as the use of liners and purge wells, may result in the lowering of water tables.

Finally, pits and quarries are sometimes licenced in areas that will destroy features of significant natural, historical, architectural, or archeological interest. For example, in recent years extractive activities have been allowed: on land intended for incorporation into a provincial park;[7] in an area of Pelee Island believed to be habitat for several endangered species of flora and fauna;[8] and on the only occurrence of the Oriskany Formation in Canada, which is the site of the only dry oak-hickory forest on sandstone in Ontario and the habitat of at least 22 rare plant species as well as for the threatened black rat snake.[9]

PART I: THE EXISTING LEGAL REGIME

LOCAL CONTROLS

Location and Prohibition - the Planning Act

Several court cases have established the rule that pits and quarries are not a "use" of land within the meaning of the zoning bylaw sections of the Planning Act.[10] This means that municipalities cannot regulate established pits and quarries through zoning bylaws. The Planning Act, however, does authorize municipalities to pass bylaws "prohibiting the making or establishment of pits and quarries". This section has been given a literal interpretation and, as a result, municipalities may zone to prohibit new pits and quarries, but the zoning bylaw cannot be used to stipulate controls such as setbacks and area limitations.[11]

Official plans may be used to some extent to regulate the location of pits and quarries. The official plan may indicate where aggregate resources lie within the municipality, fix policies to govern their extraction, and require that no rezonings to allow pits and quarries be granted until conditions are fulfilled. The plan may also indicate where it is desirable to zone land for aggregate extraction and where it is not. The Pits and Quarries Control Act provides that the Minister of Natural Resources must not issue a licence for a pit or quarry where the location is in contravention of an official plan or bylaw of the local municipality.

Recent case law interpretation of this provision, as well as provisions from the Planning Act and the Municipal Act, have complicated this requirement. The apparent meaning of section 6(2) of the Pits and Quarries Control Act, as interpreted by the Uxbridge v. Timbers Brothers Sand and Gravel Limited decision, is that if a municipality has only an official plan and it purports to prevent the operation of a pit or quarry at a location desired by an applicant, the Minister is prohibited from issuing a licence.[12] However, where the official plan does not make clear that it prohibits the operation of pits and quarries in any particular part of the municipality, and the municipality has only a bylaw that specifically prohibits the establishment of pits or quarries, the Minister is prevented by section 6(2) of the Act from issuing the licence to new operations only, not pre-existing ones. Moreover, the technical legal distinction between the operation of a pit or quarry and the "use" of land has been extended, by ministerial fiat, to the interpretation of official plans. In at least one recent case, the Minister of Natural Resources

approved a licence in an area that was designated for agricultural uses only in the official plan over the unanimous objections of local ratepayers and the municipal council.[13]

Regulation under the Municipal Act

Section 354(1)122 provides that where, prior to January 1, 1959, the use of land in any area of a municipality was restricted to residential or commercial use, the municipality may pass a bylaw prohibiting the carrying on of the operation of a pit or quarry in the area. It also permits municipalities to regulate, by bylaw, the operation of pits and quarries within the municipality, and to require the owners of pits and quarries that are located within 300 feet of a road, and that have not been in operation for a period of 12 consecutive months, to level and grade the floor and sides of the pit and the area within 300 feet of their edge or rim so that they will not be dangerous or unsightly to the public.

The courts have interpreted this provision so as to give broad powers to the municipality.[14] Such matters as hours of operation, types of machinery used, dust control, setbacks, grades, contours, and rehabilitation (including posting security to rehabilitate) are properly dealt with in such a bylaw.

Municipalities can also pass bylaws to regulate traffic on highways, and to prohibit heavy traffic on the highways specified in such a bylaw. This could include prohibition of gravel trucks. In addition, the bylaws may require individual operators to enter into an agreement with the municipality respecting their particular operations.

PROVINCIAL CONTROLS

The Pits and Quarries Control Act

The Pits and Quarries Control Act provides for the regulation and rehabilitation of pit and quarry operations in designated parts of Ontario. Operations in these areas must be licenced under the act, and are subject to periodic review to assure compliance with the provisions of the act, the regulations, and the site plan which every applicant for a licence is required to submit to the Minister of Natural Resources. The act is administered by the Division of Mines of the ministry. The division's functions include consultation and guidance to the ministry's field offices, whose pits and quarries inspectors are responsible for implementing the act. It also processes applications for, and revisions and renewals of, pit and quarry licences, which are received through the field offices, for recommendation to the Minister.

General obligations of pit and quarry operators: six months after a township is designated as coming under the provisions of the act, a licence is needed to open, establish or operate a pit or quarry. The licence is based on a site plan, and the operator must carry on his operations in accordance with the plan, although he may amend it with the consent of the Minister. Operators must ensure that the requirements of the act and regulations are complied with. No quarrying is permitted in certain geologic formations of rock within 300 feet of the natural edge of the Niagara escarpment. One month after a township is designated, the act applies to wayside pits and quarries within its boundaries, and a permit from the Minister is needed to open, establish, or operate such a site.

Licencing: the act provides that "no person shall open, establish or operate a pit or quarry except under the authority of a licence issued by the Minister to the operator". Operators of existing pits and quarries must apply for a licence when their area becomes designated under the act, as must any operation proposed after designation. Under the terms of the act, a licence application must be accompanied by a site plan, which must include:

a full description, including topography, of the lands;
all adjacent uses within 500 feet of the boundaries of the lands;
the particulars of any buildings or structures existing or proposed for the lands;
existing and anticipated final grades of excavation, contours and setbacks;
drainage provisions;

all entrances and exits;
as far as possible, ultimate pit development, progressive and ultimate road plan, any water diversion or storage, location of progressive and ultimate rehabilitation and, where possible, intended use and ownership of the land after the extraction operations have ceased;
cross-sections where necessary to show geology, progressive pit development and ultimate rehabilitation;
any other information required by the Minister or prescribed by the regulations.

Once an applicant has filed his site plan with the Minister, he must give public notice of his application by placing an advertisement in two successive issues of at least one daily or weekly newspaper having general circulation in the area. There is no requirement that neighbouring residents or others affected by the proposal be notified directly (for example, by mail). Written objections may be filed with the Minister by the municipal council or any other authority having an interest, or by any person directly affected by the issuance of a licence. The Minister will set a closing date for receiving objections. There is no requirement that this date be published in the advertisement, although as a matter of practice this is usually done. In the case of operations existing in an area before it has been designated, no public notice of the application need be given. Thus, there may be no opportunity to object to the issuance of a licence for an existing pit or quarry.

The Ontario Municipal Board may also play a role in licencing. A person who is entitled to file a written objection with the Minister (that is, the municipal council, any other "authority having an interest", or any person "directly affected") also may require the Minister to refer the question of whether to issue a licence to the Ontario Municipal Board for a hearing. As long as the person requesting a hearing has the required status described above, the Minister's obligation to refer the matter to the board is absolute. However, this right to a public hearing appears to be limited to new applications, and does not apply to pre-existing pits and quarries. The Minister may also refer an application for a licence for a new pit or quarry to a hearing on his own motion.

When the Minister refers a matter to the OMB, it must hold a hearing. No time limit is specified within which the hearing must be held, and it is not clear who will be given notice of the hearing. The act provides that the applicant, the director of the Inspection Branch of the Ministry and any other persons specified by the board are parties to the hearing. Objectors may or may not be so specified. Consequently, it is possible under the act for the hearing to proceed without notice to an objector, and without his participation. In practice, however,

the board has been careful to notify everyone involved, and to permit anyone who wishes to participate to do so.

At an OMB hearing, the parties and their witnesses give evidence and are cross-examined. At the conclusion of the hearing, the board sets down its findings and recommendations and sends a copy of its report to the Minister and to each party. However, the OMB does not have the power to make a final decision whether to issue a licence under the Pits and Quarries Control Act. The final decision is made by the Minister.

In many cases, a zoning bylaw amendment under the Planning Act is also required. If so, and if objections to the zoning amendment are filed, an OMB hearing must be held before the bylaw can be approved. As a matter of practice, the board will hear the objections to issuing a licence and to the approval of the zoning amendment at the same hearing. The OMB does have decision-making power subject to review by the Ontario Cabinet to approve or refuse to approve the necessary bylaw amendments.

Under the Pits and Quarries Control Act, the Minister makes the final decision whether to issue a licence. When there has been an OMB hearing, he must do so within 30 days after he receives the OMB's report. The act requires the Minister to consider the OMB report if a hearing has been held, but he is not bound to follow any of the Board's recommendations. An applicant to whom the Minister intends to refuse a licence may require a hearing before the OMB within 30 days of receiving notice of the Minister's intention. If he does not, the Minister may refuse the application after the 30-day period elapses.

The act states that the Minister *shall* refuse to issue a licence where the site plan does not comply with the act or regulations or where, in his opinion, the operation of the pit or quarry would be against the interests of the public, taking into account:

the preservation of the character of the environment;
the availability of natural environment for the enjoyment of the public;
the need, if any, for restricting excessively large total pit or quarry output in the locality;
the traffic density on local roads;
any possible effect on the water table or surface drainage pattern;
the nature and location of other land uses that could be affected by the pit or quarry operations; and
the character, location and size of nearby communities.

Although this language may appear superficially to impose a duty upon the Minister to refuse to issue a licence under certain circumstances, the fact that the duty is dependent upon his forming an opinion as to certain matters means that, unless the site plan does not comply with certain technical requirements, the Minister's only duty is to consider certain factors before making his decision. He has an almost unfettered discretion to approve a licence regardless of social or environmental impact. He is free to override even strong OMB recommendations to the contrary and has done so in at least one case.[15]

If a municipality has no official plan or bylaw governing the location of pits and quarries, the Minister must not issue a licence if the municipal council objects within a 45 day period after receiving notice that an application has been filed.

The Minister may issue the licence subject to such terms and conditions as he, in his discretion, considers advisable. In many cases, the terms and conditions imposed will be those recommended by the OMB.

Regulation of the operation: once a licence has been issued, the operator must comply with the site plans submitted by him, with any terms and conditions attached to the licence, and with the act and regulations.

The regulations are of general application, and thus their provisions are seldom specific enough to create a legally enforceable obligation on any particular operator. The regulations deal with such matters as setbacks, maximum slopes, stockpiling of topsoil, screening, berming, fences, location of entrances and exits, and timing of the detonation of explosives.

Licence review and revocation: the act requires the Minister to review each licenced operation annually for the purpose of reassessing compliance with the act, regulations, site plan, and terms and conditions of the licence. If any of them are not being complied with, the Minister may revoke the licence. The licencee is entitled to notice and the opportunity for an OMB hearing before revocation. In holding a revocation hearing, the OMB may consider matters not directed to it by the Minister, including environmental concerns.[16] The Minister may also make an interim suspension of the licence where, in his opinion, the operation constitutes an immediate threat to the public interest. If no hearing is required by a licence holder within 30 days of ministerial notice, the Minister may then proceed to revoke the licence.

Regulation of operation and rehabilitation: to ensure that the operator rehabilitates a worked-out pit or quarry, the regulations require him to deposit security with the ministry in an amount equal to 2 cents per ton of material removed from the pit or quarry in the previous year, up to $100,000 or $500 per acre of the property, whichever is greater. When rehabilitation has been completed, the operator is entitled to get any remaining money back.

Operators of all pits and quarries have a duty to rehabilitate the site, whenever possible, while the pit is operating. To encourage progressive rehabilitation, if an operator carries out rehabilitation gradually as his operation progresses across the site, he is entitled to refunds from the security deposit, though he may not reduce the amount payable to less than $100 for each acre requiring rehabilitation.

Operators must stockpile sufficient existing topsoil, stripping, or fill to facilitate rehabilitation of the site. The stockpile must have stable slopes and seeding to prevent erosion. Existing topsoil must be maintained in a quantity and condition sufficient to permit the growth of vegetation adequate to bind the soil and to prevent erosion. Topsoil must be replaced in excavated areas and other areas designated in the site plan or to a slope no steeper than 45 degrees. Where excavations are made to a water-producing depth, the slope must not exceed 1.5 to 1.

Where the Minister permits a pit or quarry to operate within 50 feet of the road allowance of a highway, instead of the normal 100 feet, the operator is responsible for a program of progressive rehabilitation of that additional 50-foot right-of-way.

Any perched ponds (defined in the regulations as a pond of a certain minimum size resulting from a pit or quarry excavation, which is above the natural water table) that may be a hazard to life must be drained to the lowest level of the land in the pit or quarry excavation.

Offences, penalties and restraining orders: violation of any provision of the act or regulations, or breach of any term or condition of a licence or permit, is an offence for which the maximum fine is $5,000 for each day on which the offence occurs or continues. The Minister may commence a prosecution in provincial court, but no member of the public may institute a prosecution except with the consent and under the direction of the Minister. This provision alters the unrestrained

common-law right of any person to prosecute for violations of any provincial legislation. The Minister is also authorized to apply to a judge of the Supreme Court of Ontario for an order directing any person to comply with the act or regulations.

The Mining Act

There may be less control of such matters as rehabilitation in areas where the Pits and Quarries Control Act has not been designated as applicable. In such circumstances, the principal MNR control is the Mining Act which is applicable to quarrying activities on Crown lands. In a previous study, one of the authors found that some MNR administrators were of the opinion that quarry operations under the Mining Act might be subject to less control, because under that act no site plan comparable to the one required by the Pits and Quarries Control Act is required before a licence is granted.[17] It was thus felt that an operator lacks the guidance normally provided by a site plan in avoiding or controlling erosion or sedimentation problems. Moreover, the Mining Act does not authorize a system of security deposits to ensure that operations on Crown lands will be rehabilitated.

It is also understood that operations on Crown lands within areas otherwise designated under the Pits and Quarries Control Act must comply only with the less comprehensive provisions of the Mining Act.[18]

The Ontario Water Resources Act and the Environmental Protection Act

Provincial agencies can control water resource interference from pits and quarries by use of a water-taking permit under section 37 of the Ontario Water Resources Act. Impairment of water quality is also an offence under that act and the Ministry of the Environment could require an approval under section 42 of the OWRA as a condition of allowing an operation.

The Ontario Water Resources Act authorizes the Ministry of the Environment to require a water-taking permit from any person who intends to take more than a total of 10,000 gallons of water in a day by means of a well, inlet supplies, or diversion structures or works constructed for that purpose. The ministry may issue or cancel such permits, impose terms and conditions before issuance, and alter them afterwards. Where the taking of water interferes with the use and interest of other people, it is prohibited without a permit issued by the ministry. Flowing or leaking

water from a permitted well, diversion, or other work that interferes with another public or private interest in the water may be required to be corrected to the satisfaction of the ministry. Contravention of these provisions is punishable by a fine of up to $200 for every day that the contravention continues.

The water-taking permit program under the OWRA is aimed primarily at protecting water quantity, not water quality. It is meant to ensure that a pit or quarry operation will not seriously lower water tables or affect the quantity of water available to existing water users. Historically, the water-taking permit system had been used to ration water used for agricultural irrigation systems during low flow periods. The permit system was established to provide some protection to groundwater users since none existed under riparian rights or common law.

Where there is or is likely to be an effluent discharge associated with a pit or quarry operation, certificates of approval under the Environmental Protection Act, and approvals under the OWRA if the discharge were into a watercourse, would be necessary. Environment Ministry administrators have indicated, though, that it would be rare for them to require a certificate of approval for water quality concerns arising out of the operation of a pit or quarry.[19] The Ministry of the Environment Industrial Abatement Offices have indicated that, in a least two MOE administrative regions, no pit or quarry operations have been issued certificates of approval, although several have water-taking permits.[20]

Prohibitions in the Environmental Protection Act against noise and air pollution would also apply to pits and quarries.

The Highway Traffic Act

Under the Highway Traffic Act, heavy trucks on unpaved highways require special permits. Any truck that is loaded or even half loaded with gravel will be overweight, and thus using the unpaved road illegally, unless it has the required permit from the oversize-overweight permits bureau of the Ministry of Transportation in Toronto. Weight restrictions relating to the type of truck and the number of axles are established for class A highways. No vehicle weighing over 22,000 pounds may travel a class B highway without a permit. Using the highways without a permit or in a way that violates the conditions in the permit is an offence punishable by a fine which increases in proportion to the amount the load exceeds the act's limits.

PROVINCIAL STATUTES WHICH EXEMPT EXTRACTION ACTIVITIES

Because it was felt that certain controls on extraction operations duplicate controls which will be provided by the proposed Aggregates Act, or because these controls have been used with some success to impede the development of pits and quarries, the provincial government has recently exempted the operation of pits and quarries from certain provincial statutes. It appears that the government intends to restrict the application of certain other statutes to pits and quarries, or even to exempt operations completely from all statutes except the proposed Aggregates Acts.

The Trees Act authorizes municipaliites to pass bylaws prohibiting land owners from destroying trees on their land, provided that the parcel of land is over two acres in size. Such bylaws have been used to prevent operators licenced under the Pits and Quarries Control Act from extracting aggregate from their property, according to one recent government report.[21] The Mineral Aggregate Working Party, whose report will be discussed below, felt that tree cutting and regeneration could be controlled through site plans under new pits and quarries control legislation, and therefore recommended that licensed pits and quarries be exempted from the Trees Act. The provincial government, however, went further, and exempted pits and quarries licensed under the Mining Act, which requires no site plan. The Trees Act was amended in June to provide that a municipal tree-cutting bylaw will have no application to trees on land described in a licence for a pit or quarry or a permit for a wayside pit or wayside quarry issued under the Pits and Quarries Control Act, or to trees destroyed in order to lawfully establish and operate or enlarge a pit or quarry on land that has not been designated under section 2 of the Pits and Quarries Control Act.

The Topsoil Preservation Act, which came into force November 25, 1977, allows municipalities to pass bylaws regulating or prohibiting the removal of topsoil anywhere in the municipality or in a specified area defined in the bylaw. However, topsoil removal activities authorized under the Pits and Quarries Control Act and the Mining Act are exempted from any such bylaw, as are topsoil removal activities by any Crown agency, or by county and regional governments.

The Ontario Mineral Aggregate Working Party also recommended that pits and quarries be exempted from the provisions of the Environmental Assessment Act, as a result of its belief that new legislation based on its recommendations will provide equivalent environmental protection.[22] The Environmental Assessment Act provides

a new approval process through which certain undertakings that may have significant environmental impacts must pass before they are commenced, and provides for extensive public participation in the decision-making process prior to licencing. The act is to be implemented in stages. It will apply first to the public sector, both provincial and local, except where exempted by order or regulations, and later to private projects which have been designated as major and have been individually designated for assessment under the act.

To date, the act has been applied to projects of the Ontario government Crown agencies and conservation authorities, but not yet to municipal undertakings. The act has been proclaimed in force for private undertakings, but only three have been designated for assessment. The probability of an exemption from the EAA is reinforced by the White Paper on the Planning Act issued in May of 1979, which states that the Environmental Assessment Act will be made applicable only to private undertakings that are determined by Cabinet to be of major provincial significance. "The great majority of private developments will not be of this magnitude and so would remain subject to the Planning Act."[23] Most pits and quarries of major significance are private undertakings.

It appears unlikely therefore that even major extractive activities will be subject to the Environmental Assessment Act, except in exceptional circumstances. Nevertheless, there are also indications that revisions to the Planning Act may curtail public participation in making planning decisions about pits and quarries, and may remove existing municipal powers to use zoning bylaws and official plans to prohibit establishment of pits and quarries. The situation will be described in greater detail below.

COMMON LAW RIGHTS AND REMEDIES

Those who own property in close proximity to a pit or quarry and who experience serious aggravation may have a cause of action against the pit or quarry operator based on the law of nuisance. In some circumstances, trespass, riparian rights, negligence, strict liability as set out in Rylands v. Fletcher,[24] and statutory liability may also apply.

In one recent case, the Supreme Court of Ontario granted an injunction restraining an owner from operating his pit and quarry so as to cause a nuisance to the plaintiffs by reason of noise between the hours of 9 p.m. and 7 a.m. In addition, these plaintiffs were awarded damages for interference with their use of their property due to the noise occasioned by the pit.[25]

It is unlikely that an injunction ordering operations to cease entirely will be imposed where the pit was in operation (no matter how minimal the operation) at the time an owner or occupant took up residence in its vicinity; however, damages may be awarded in such a case on the basis of the discomfort and inconvenience suffered by the plaintiff due to the dust, fumes, and excessive noise level caused by the pit or quarry operation. No damages may be recovered for the loss of a pleasant view and its replacement by an unsightly or unaesthetic use of the land.[26]

Until recently, it was believed that damage caused by the taking of groundwater from under one property owner's land by another was not actionable. However, the Supreme Court of Canada has recently ruled that subsidence of land caused by removal of groundwater may be actionable in nuisance or negligence.[27] The Ontario Court of Appeal has ruled that contamination of groundwater is also actionable.[28] These cases may be extended in future to provide relief for other kinds of damage caused by lowering or raising the water table, such as drying up of wells or flooding of crops.[29]

DEFECTS IN THE PRESENT LEGISLATION

The present Pits and Quarries Control Act was passed in November of 1971 with the intention of providing rules and regulations which would accelerate rehabilitation and minimize the environmental impact of pits and quarries, while still ensuring a steady supply of aggregates. There is considerable evidence that this effort has been unsuccessful. The current legal regime, and in particular the Pits and Quarries Control Act, has generated considerable conflict and resulted in litigation:

> by neighbours against gravel pit operators;[30]
> by neighbours of pits and quarries seeking to prevent the Minister of Natural Resources from issuing licences;[31]
> by municipalities seeking to restrain pit and quarry operators from operating in contravention of municipal bylaws;[32]
> and by ratepayers alleging bad faith on the part of municipal councils in designating land for extractive purposes without adequate notice or public participation.[33]

Ontario Mineral Aggregate Working Party

In December 1975, following a report to the Ministry of Natural Resources by a consulting firm which predicted that the central Ontario region would run out of sand and gravel in twenty years unless changes were made to facilitate extraction,[34] the Ontario government appointed a working party made up of representatives of the provincial government, municipal councils, the aggregate industry, and environmental groups to recommend an effective and broadly acceptable mineral aggregate resource management policy for the province. In its report, the Ontario Mineral Aggregate Working Party concluded that a confrontation situation exists between residents of extractive areas and the aggregate industry, and that the problem areas to be eliminated by the Pits and Quarries Control Act were "little improved".[35] The working party accused the provincial government of lacking credibility because of its failure to enforce the pits and quarries act, weaknesses in the act, and lack of rehabilitation of pits and quarries.[36] They concluded that even if the act had been stronger, it would not have been enforced.[37] They suggested that there is one basic reason for the Pits and Quarries Control Act not having accomplished its intended purpose: both the act and the report of the Mineral Resources Committee appointed by the government in 1969, upon which the act is based, have the essential priorities reversed. The Mineral Resources Committee had suggested the following priorities:

> i) maximum utilization of available resources;
> ii) provincial control over the establishment, operation, development and rehabilitation of pits and quarries and attention to environmental concerns;

iii) municipal involvement in deciding where pits and quarries are to be located.[38]

The present act reflects this order of priorities.[39]

The working party recommended reversing this order of priorities. They suggested that any legislation to control the extraction of mineral aggregates must ensure, *first*, protection of the environment, and, *second*, that adequate supplies of aggregate resources are made available in the appropriate locations.[40]

The working party identified the following defects in the present act:

i) due to the lack of specifications in the regulations and other omissions in drafting, the act is difficult to enforce;
ii) rehabilitation requirements are frequently not adequately identified on site plans;
iii) even if the act had been drafted more specifically, it would not have been enforced.[41]

The working party gave nine examples of these defects:

i) the establishment of what was "acceptable" or "essential" in the location and operation of extractive operation was contained in the regulations and was subject to interpretation by the administration;
ii) the act ignores completely the problems and process of establishing the "need" for pits and quarries in any given "local municipality", yet requires the Minister of Natural Resources to address the problem;
iii) the process by which resource zoning was to be achieved was not adequately developed or explained;
iv) the act does not provide any capabilities to encourage the rehabilitation of abandoned pits and quarries on private land;
v) problems caused by conflicts and overlapping legislation were not resolved;
vi) while the Mineral Resources Committee recommended that the same standards be applied to old and new operations and that they be enforced uniformly across the province, little or no attention was given to the practical application of the recommendations, to the definition of rehabilitation, and to how rehabilitation was to be achieved and/or enforced;
vii) the act ignores completely the pleas from the municipalities for compensation to cover the real municipal cost of the extractive industry;
viii) the Mineral Resources Committee did examine the need for, and problems of, wayside pits, and recommended that they should be subject to the minimum performance standards recognized for permanent operations. However, it is questionable whether this is being achieved under the present act;
ix) it was clear that the Mineral Resources Committee was hampered by the lack of critical data. The committee recommended resource studies, and while much progress has been made in this direction in the last five years, there is still a great deal of research necessary.[42]

The working party indicated that there has been "little evidence of rehabilitation achieved to date".[48] Lacking definitive statistics, the working party estimated

that effective rehabilitation had occurred in a very minimal percentage of the disturbed area. A study by landscape architect William Coates later confirmed that adequate rehabilitation had been achieved on less than half the area of pits and quarries in the part of southern Ontario which he studied.[49] The working party found "sufficient evidence to conclude that many operators view the 2¢ per ton rehabilitation security fee as simply a tax, which they propose to forego, and leave the task of rehabilitation to the province".[50]

Fifty percent of Ministry of Natural Resources regional offices surveyed in 1977 said that the currently required security deposit to ensure rehabilitation of 2¢ per ton was "too low" or "inadequate". Another 33 percent indicated that in their administrative region, no security deposit at all was required.[51] (This includes regions where the Mining Act applies to pits and quarries on Crown lands.) One regional office of the Ministry of Natural Resources noted that since 1971 it had spent approximately $100,000 to rehabilitate fifty sites.[52]

The working party noted that most aggregate extraction areas are covered by very limited amounts of topsoil and overburden. During the course of its review, it was informed that topsoil was being stripped off land, both as a source of revenue and to facilitate rezoning by changing the agricultural classification of the land involved.[53] Half the regional MNR offices surveyed in 1977 found no difficulties in the manner in which operators dealt with such items as topsoil control, drainage, grading, and the use of excavation equipment, in the site plan or in practice. The remaining offices characterized operator practice respecting such matters as varying from "good" through "satisfactory" to "poor", "terrible", or "disappointing".[54]

It will be argued below that the proposed Aggregates Act will suffer from most of the same deficiencies the working party and public interest groups identified in the present act and its administration. As will be seen, the reason for this is that while the working party acknowledged the place of environmental protection and local involvement in the aggregate planning process, its recommendations, taken as a whole, promote maximum utilization of available aggregate resources. Environmental and public participation concerns appear to be subordinate to this goal. There are indications in its report that the working party was more concerned with influencing the public perception of the aggregate industry than with real changes in that industry's practices.[55] The same is true of policies proposed by the Ministry of Natural Resources, which will be described below.

Other Studies of Existing Legislation

In addition to the defects noted by the working party, ratepayer groups and conservation associations such as the Sierra Club of Ontario[43] and the Canadian Environmental Law Association (CELA)[44] have identified further problems with the legislative regime and, in particular, the Pits and Quarries Control Act:

i) the lack of any provincial legislation or policies that ensure that preservation of significant natural features will be given at least equal weight or priority in the case of any conflict between the establishment and location of an extractive operation and an area of biological or geological significance. The one exception to this is the Endangered Species Act, which appears to give priority to protection of habitat of a species of flora or fauna listed under that act as endangered. Even this statute is virtually "toothless" since it empowers the Minister of Natural Resources to prosecute an offender but gives the government no power to prevent destruction of endangered species habitat by seeking an injunction or restraining order. Moreover, a recent case indicates that the Ministry of Natural Resources, which administers both the Pits and Quarries Control Act and the Endangered Species Act will give priority to extractive operations where establishing conclusive evidence that they will destroy endangered species habitat requires further study;[45]

ii) the lack of any provincial concern for, or any policies that would ensure steps towards, conservation of the nonrenewable aggregate resource. All policies appear to be oriented towards facilitating meeting, not *need* for aggregate resources, which could take into account conservation measures, but *demand;*

iii) the attitude of the Ministry of Natural Resources staff. The working party attributed lack of enforcement to insufficient staff.[46] However, conservation groups have claimed that the orientation of the ministry staff responsible for administering the act is toward assisting the industry and promoting resource extraction rather than satisfying local concern for environmental protection. CELA has noted that ministry officials are reluctant to take action against violations of the regulations, even when such violations are obvious and have been drawn to their attention by victimized neighbours;[47]

iv) legal restrictions on public enforcement of the Pits and Quarries Control Act. The Ministry of Natural Resources, through the Pits and Quarries Control Act, retains for itself a virtual monopoly over enforcement mechanisms, with the exception that a private citizen may initiate a prosecution for breach of the act or regulations if he can obtain the permission of the Minister. Other remedies in the act, such as licence suspension or revocation, and issuance of a restraining order, may be initiated only by the ministry and there is no way the private citizen can compel the Minister to use any of his powers even when violations are flagrant. None of the remedies in the Pits and Quarries Control Act, including that of licence revocation, can be invoked if an operator merely violates municipal bylaws.

PART II: OPPORTUNITIES FOR CHANGE

THE PROPOSED AGGREGATES ACT, BILL 127

On June 14th, the Minister of Natural Resources introduced Bill 127, "An Act to Revise the Pits and Quarries Control Act, 1971", in the Ontario Legislature. He has stated that this act, to be known as the Aggregates Act, flows from the report of the Ontario Mineral Aggregate Working Party, submitted to the Minister in December of 1976.[56] The Minister has asked the public for comments on this proposed legislation by September 15.

The new act has three purposes:

i) to provide for the management of the aggregate and Crown aggregate resources of Ontario;
ii) to control and regulate pits and quarries, wayside pits and quarries, and Crown aggregate pits and quarries;
iii) to require the rehabilitation of land from which aggregate or Crown aggregate has been excavated. "Rehabilitate" is defined to mean "to treat land from which aggregate or Crown aggregate has been excavated 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". "Crown aggregate" is essentially aggregate on Crown lands.

The Minister of Natural Resources continues to be responsible for the administration of these matters. As indicated by the change in title, the scope of the new act envisages more than control of pits and quarries. Its concern with overall mineral aggregate resource policies is reflected in section 3, which gives the Minister, among other powers, authority to conduct research, locate commercially viable aggregate deposits, estimate the demand for aggregate and establish policies for its supply, do statistical analysis, and advise ministries and municipalities on planning matters related to aggregates, including the preparation and approval of official plans and zoning bylaws.

As under the Pits and Quarries Control Act, the Minister may designate inspectors to enforce the act. Section 4 sets out the powers of an inspector, which are not substantially different from those an inspector had under the existing act, with the relatively minor exception that an inspector has additional powers to demand the production of a quarrying licence and certain other records. Impeding an inspector in the performance of his duty continues to be an offence.

The act and regulations will apply only in the parts of Ontario that have been designated under the Pits and Quarries Control Act, or which are designated by the Cabinet in future by regulation.

A new provision states that the act binds the Crown and its agents, except that Part V of the act, dealing with issuance of permits to excavate aggregates on Crown lands is not binding on the Crown. Where the Crown or its own agent excavates aggregates on Crown lands, the government needs to rehabilitate only to the satisfaction of the Minister of Natural Resources. Thus, there are no objective standards for rehabilitation of Crown lands by Crown agencies, but unfettered discretion to be exercised by the Minister.

The act envisages two classes of pit and quarry licences. A class A licence is required to excavate more than 20,000 tonnes of aggregate yearly. A class B licence is required to excavate less than 20,000 tonnes. An applicant for either class of licence must accompany his application with 5 copies of a site plan, information showing that the location of the land described in the site plan complies with any relevant zoning bylaw, and an application fee to be prescribed by regulations.

A new provision permits the Minister also to require an applicant for a licence to furnish him with any additional information he considers necessary and to refuse to consider the application until the information is furnished to his satisfaction. As the Minister already had authority under the Pits and Quarries Control Act to require additional information, it is questionable whether this adds substantially to his powers.

The act contains a list of items of information which must be shown in the site plan. The information which must be provided by an applicant for a class A licence is substantially more extensive than the information to be proviced by an applicant for a class B licence. The information required from an applicant for a class A licence is largely the same as that required under the Pits and Quarries Control Act from an applicant who would produce more than 10,000 cubic yards per year, except that the description of existing and final grades, any water diversion or storage, and intended ownership and use of the land after rehabilitation required by the Pits and Quarries Control Act do not appear to be required, at least explicitly, by the new act. Under the Pits and Quarries Control Act, an applicant for a licence in respect of a pit or quarry producing less than 10,000 cubic yards per year could use a short form prescribed by the regulations,

requiring less information. Under the new act, the information required of a class B applicant is spelled out in the act itself. He must provide the same information as the class A applicant except that he is not required to describe the water table, the location of wells in the vicinity, whether he intends to excavate below the water table, or the maximum depth of excavation.

The act also contains new requirements that a site plan accompanying an application for a class A licence must be certified by a professional engineer or other professional person and a site plan with a class B licence application must be signed by the applicant, but need not be certified by a professional.

Like the Pits and Quarries Control Act, the new act contains a checklist of matters which the Minister must consider before issuing a licence. From the viewpoint of public participation, environmental protection, and resource conservation, the following changes in this requirement are of interest. In the Pits and Quarries Control Act, the Minister was to take into account "the preservation of the character of the environment" and "the availability of natural environment for the enjoyment of the public", as well as "the need if any for restricting excessively large total pit or quarry output in the locality". None of these requirements are mentioned in the new act; however, in the new act, the Minister must consider "any comments provided by the municipalities in which the site is located".

Under the existing act the Minister has a "duty" to refuse a licence where in his opinion certain effects would result from its issuance. Under the new act he is merely required to "have regard to" these effects. Legally, there is no difference in effect, as neither act requires the Minister to do more than put his mind momentarily to these rather broad guidelines, or imposes any reviewable or enforceable obligation upon him. However, from a policy viewpoint, the changes may be revealing.

The provisions of sections 6(2) and (3) of the Pits and Quarries Control Act stipulate that the Minister shall not issue a licence where the location is in contravention of an official plan or municipal bylaw and that where a local municipality does not have an official plan or bylaw governing the location of pits and quarries the Minister may not issue a licence if the council objects to the location. Both these provisions have been deleted from the new act. Under the new act, the Minister may not issue a licence which would locate a pit or quarry in contravention of an existing *zoning* bylaw, except that where an application is made for a licence for an established pit or quarry, licenced under the present act or

operating before a township is designated under this act, the Minister may issue a licence for it even if its location contravenes an existing zoning bylaw. Where the Minister is satisfied that an application for a licence and the documents accompanying it comply with the act and regulations, he will serve a copy of it and the accompanying documents upon the clerk of the regional municipality or county and the clerk of the local municipality in which the site is located. The municipality and anyone else who wishes to comment then have 45 days in which to comment on the application or submit objections in writing to the Minister. The applicant then has an obligation similar to his obligation under the Pits and Quarries Control Act to advertise his application in the local newspapers, and a new obligation to notify the Minister of the publication of this notice.

The right to object to the issuance of a licence is somewhat broader than in the Pits and Quarries Control Act, but the effect of an objection is somewhat less substantial. Under the existing act, only a municipality, an "authority having an interest", or a person "directly affected" had the right to submit a written objection to the Minister. Under the new act, anyone may submit a written objection. In practice, however, this should make little difference, as the ministry has never been known to refuse to accept a written objection from anyone.

Under the Pits and Quarries Control Act, only someone who was entitled to object was entitled to require a hearing by the Ontario Municipal Board before a licence was issued. In theory, therefore, the class of persons entitled to a hearing was limited, but if entitled to object, a person had an absolute right to a hearing. In practice, the Minister has not usually used this status test to refuse a hearing, so that if a hearing was otherwise available, any person had a *de facto* right to one. Under the new act, however, the Minister has a broader discretion to refuse to refer an objection to the Ontario Municipal Board for a hearing. The Minister need initiate a hearing only where the written objection, in his opinion, discloses an interest that is sufficiently substantial to warrant a hearing and is not frivolous or vexatious. This appears to confer upon the Minister an almost unfettered discretion to refuse a hearing in any case. As under the Pits and Quarries Control Act, the Minister may also, on his own motion, refer a matter to the board for a hearing. The new act provides formal authority for the existing practice of the O.M.B. of considering both a licence application and any objection to a zoning bylaw amendment that may be needed to establish a pit or quarry at the same hearing.

The new act gives the Minister powers similar to his existing authority to issue a licence and to impose conditions, which he may rescind or vary at any time. A new provision requires the Minister to notify the upper tier and lower tier municipality in which the site is located once he has issued a licence.

An important new provision requires every licencee to pay to the Ontario Treasurer a yearly licence fee for the previous year calculated in accordance with the regulations. If the fee is not paid, the Minister may revoke the licence without giving the operator any prior notice or right to a hearing before the Ontario Municipal Board.

The annual licence fee is to be divided at least two and probably three ways, according to percentages to be established in the regulations. Part of the fee is to be paid to municipalities, and part is to be set aside as a fund for rehabilitation of abandoned pits and quarries. Although it is not clear from section 14, presumably the provincial government will retain part of the fee. Certainly it was contemplated by the working party that the Ministry of Natural Resources would receive part of this fee to expand its enforcement staff.[57]

The Minister may require a licencee to amend his site plan, or the licencee may amend the site plan with the Minister's approval. However, if the Minister requires the licencee to amend his site plan against his will, the licencee has a right to a hearing before the Ontario Municipal Board. Curiously, the Minister is a party to this proceeding and is also the final decision maker. The board hears the views of the licencee, the Minister, and any other person it specifies as a party and reports its findings and recommendations to the Minister, who then considers the Board's report and makes a decision, which is final.

The new act provides for a more extensive review of ongoing operations than the existing one. Under the Pits and Quarries Control Act, the Minister had a rather vague obligation to "review the operation" at least once a year to assess the licencee's compliance with the act, the regulations, the site plan and the terms and conditions of his licence. The Minister now has an additional obligation to make an actual physical inspection of every site at least once a year. In addition, every five years the Minister must request the regional or county council and the local municipal council for its comments respecting each pit or quarry. The new act does not impose upon the Minister any obligation to undertake any action on the basis of the information which comes to his attention through this process.

Section 14 of the Pits and Quarries Control Act prohibited an operator from transferring a licence or permit. Under the new act, the Minister may consent to the transfer of a licence provided that he receives a site plan from the new operator. The money in the previous operator's rehabilitation security account (that is, his security deposit towards ensuring rehabilitation) is automatically transferred into an account in the name of the new licencee. Another new provision also empowers the Minister to accept the surrender of an operator's licence once he is satisfied that rehabilitation work has been done in accordance with the act, the regulations, the conditions of his licence and the requirements of his site plan, and that his annual fee and rehabilitation security are not in arrears. If these conditions have been satisfied, the government must then refund any sum remaining in the former licencee's rehabilitation security account. After a "sole licencee" (a term which is not defined in the act but presumably refers to an individual) dies, his licence automatically expires one year after death unless his personal representative obtains the Minister's permission to operate the site.

The Minister has the same discretion he previously had to refuse to issue a licence. He may revoke a licence for any contravention of the act, the regulations, the conditions of the licence, and the requirements of the site plan. If he refuses to issue a licence, refuses to consent to a transfer of a licence, revokes a licence, requires a site plan to be amended, or after the issue of a licence adds a condition to a licence or rescinds or varies any condition of a licence, the applicant has the right to a hearing before the Ontario Municipal Board as described above. The effect of such action by the Minister under the new act is considerably stronger than under the Pits and Quarries Control Act. Under the act, the Minister's decision could not take effect until after an O.M.B. hearing unless in his opinion the continuation of the operation constituted an immediate threat to the interests of the public. Under the new act, his revocation of a licence, requirement that a site plan be amended, refusal to transfer a licence, or changes in conditions of a licence, take effect as soon as he serves notice upon the applicant or licencee and remain in effect until he makes his decision after considering the O.M.B. report.

The Minister can also now suspend a licence temporarily pending an O.M.B. hearing without having to show that the continuation of the operation constitutes an immediate threat. Where a licence has been suspended, the upper tier and lower tier municipality in which the site is located are also now entitled to notice of the suspension. The Minister must advise the licencee of the remedial action

he must take to have his suspension removed and the duration of the suspension period. If the licencee has not taken required action within this period, the Minister may revoke the licence, subject, of course, to the licencee's right to an O.M.B. hearing.

Part III of the new act envisages a similar licencing process for wayside pits and quarries. Under the Pits and Quarries Control Act, any public authority that has a road construction project that requires aggregate may apply to the Minister for a wayside pit or quarry permit. Under the new act, wayside pits and quarries may be opened to provide aggregates for public authorities other than road authorities to carry out other projects in addition to road construction and the public authority need not apply for the permit; the permit to operate a wayside pit or quarry may be issued to its contractors. New provisions require the Minister to send a copy of any wayside pit or quarry permit he issues, and the documents accompanying it, to the upper and lower tier municipality in which the site is located. The act now will require the applicant to submit to the Minister five copies of his application, together with five copies of a site plan showing the location of the site, the parties to the contract, the name and address of the owner of the site, the size of the site, existing and estimated final elevations, surrounding land uses and the location of buildings to be erected on the site entrances and exits, significant natural features, proposed drainage facilities and rehabilitation plans, among other items of information. In addition, the Minister in considering an application now will have to have regard to information provided by the municipalities in which the site is located, the cost of transporting aggregate to the project from the site as compared with alternative sources of supply, proper management of the aggregate resources of the area, previous permits for the site, rehabilitation, and proposed aesthetic improvements to the landscape. Notwithstanding the obligation to "have regard" to this information, the Minister has an absolute discretion to issue a wayside permit despite objections and whether or not the location complies with local zoning bylaws. If there is any conflict between a zoning bylaw and a wayside pit or quarry, the permit overrides the bylaw.

The permittee must operate in accordance with the act, regulations, the conditions of his permit, and the requirements of his site plan. The Minister may at any time add a condition or rescind or vary any condition in a permit. He may also suspend or revoke a permit for any contravention of the act, the regulations, the permit or the site plan. There does not appear to be any opportunity for a hearing by the Ontario Municipal Board in such a case.

Part IV of the new act deals with abandoned pits and quarries. It contains an entirely new provision allowing the Minister to declare any pit or quarry to be abandoned, if it is unlicenced, after receiving the consent of the person assessed for the land on which it is located and after consulting with both the upper tier and lower tier municipality where it is located. Once a site is declared "abandoned", the Minister may disburse any part of the abandoned pits and quarries rehabilitation fund collected through licence fees to rehabilitate it. The Minister may also use the fund to pay for surveys or studies respecting the rehabilitation of abandoned pits and quarries.

The act contains a new part V regulating the extraction of aggregates on Crown lands. Crown aggregate includes not only sand and gravel but also clay, shale, limestone, dolomite, sandstone, marble, granite, quartz, feldspar, fluorspar, gypsum, diatomaceous earth, marl, peat, or other material prescribed by the regulations. The provisions of this part supplement some aspects of regulation under the Mining Act and replace others. The act provides that its provisions and regulations are in addition to and not in substitution for the provisions of part IX of the Mining Act, and that if there is a conflict between this act or regulations and the Mining Act, the provisions and regulations under this act would prevail. However, part VII of the Mining Act would not apply to any area of Ontario to which, this act applies, except that quarry permits already issued under part VII of the Mining Act would continue to be governed by that act.

It will now be unlawful to operate a pit or quarry on Crown lands without a permit. Any person may apply to the Minister of Natural Resources for a Crown aggregate permit authorizing operations for up to five years, and, after receiving one, may apply once before it expires for a further permit for the same site. Although the act could be drafted more clearly, it would appear that this subsequent permit also has a maximum life of five years. Upon applying for a permit, the applicant must submit a site plan showing the location of the site, a general description of the site, its size and shape, existing and estimated final elevations, use of surrounding land and buildings, and plans for rehabilitation. The application must be signed by the applicant. As mentioned above, the requirement that an applicant submit a site plan is an improvement over requirements for permits to excavate Crown lands under the Mining Act. The Minister may issue or may refuse to issue the first, or a subsequent, permit, and may add, rescind or vary any condition of the permit at any time. The permittee must operate his pit or quarry in accordance with the act, regulations,

his permit and site plan. If he does not, then the Minister may suspend or revoke his permit. He may also revoke the permit where in his opinion a substantial amount of aggregate has not been removed from the site during any year. He may suspend or revoke the permit where in his opinion the operation of the pit or quarry is contrary to the public interest. He has discretion to refuse to issue a permit, to refuse to issue a second permit and to consent or refuse to consent to the transfer of a permit. Where he takes any of these actions, they take effect as soon as the applicant or permittee has been given notice.

Where the Minister has suspended or revoked a permit, or refused to issue a subsequent permit, he must give the applicant or permittee notice with reasons for his decision and an opportunity for a hearing by the Mining and Lands Commissioner. The commissioner may make a binding decision in the matter; however, any party to the proceedings may appeal the commissioner's decision to the Supreme Court of Ontario if he serves notice within 15 days after receiving the decision.

The act does not appear to allow a permittee any hearing to question the Minister's decision to add or vary conditions of a permit, or his refusal to authorize a transfer of a permit, or to refuse an initial permit.

The act also requires every Crown aggregate pit or quarry permittee to pay a permit fee to be prescribed by the regulations to the Treasurer of Ontario and a royalty per tonne in an amount to be prescribed by the regulations and in an amount to be determined by the Minister to ensure payment of these royalties. If a permittee defaults in the payment of a royalty, the Crown may recover it from the security deposit or by suing. Where the Minister considers it in the public interest, he may authorize any public authority with a project requiring Crown aggregate to remove it from a site for which someone else has a permit. He can also authorize any Ontario resident to extract aggregate from Crown lands for his own personal use without submitting a site plan or paying any prescribed application fee or permit fee. The Crown need not obtain a permit.

Part VI covers rehabilitation of worked-out pits and quarries. It provides for yearly rehabilitation security payments by all licencees, every applicant for a wayside pit or quarry permit, and every Crown aggregate permittee, to be paid at a specific rate per tonne of aggregate extracted, based on the previous year's extraction. In each case, the rate of the rehabilitation security payment is to be established by regulation, subject to a maximum sum per hectare needing rehabilitation, which is also to be prescribed by regulation. These payments are

to be held in an account in the name of the licencee or permittee earning interest at a rate to be prescribed by regulation. The interest will form part of the rehabilitation security and may be paid back out to the licencee or permittee when the Minister is satisfied with the rehabilitation. If the licencee or permittee proves to the satisfaction of the Minister that he has performed progressive rehabilitation on his site in accordance with the act, regulations, licence or permit and site plan, he is entitled to a refund, up to twice a year, of an amount to be determined by the regulations. The regulations will also establish an amount below which the refund may not reduce the remainder of the rehabilitation security account, so that it is intended that there will always be an amount left in the account to ensure final steps in rehabilitation. When the licencee or permittee has proved to the Minister's satisfaction that he has performed his final rehabilitation work in accordance with the act, regulations, licence or permit and site plan, the government must refund the total sum remaining in his account. If the required rehabilitation work has not been done, the Minister may do the work and the government may recover the cost of this work from the licencee's or permittee's rehabilitation security account. If any sum remains in the account after the cost of the rehabilitation work performed by the Minister has been paid to the government, it must be returned to the licencee or permittee. However, if the amount in the account is insufficient to defray the cost of rehabilitation work performed by the Minister, the Crown may sue for the remainder as a debt. The Crown and its agents who excavate Crown aggregate have a duty to rehabilitate to the satisfaction of the Minister of Natural Resources, but not to deposit any security in an account or to rehabilitate in accordance with any pre-existing site plan.

Part VII sets out the offences and penalties created by the act. The offences are essentially the same as those in the Pits and Quarries Control Act: operating a pit or quarry without a licence, operating a wayside pit or quarry or Crown aggregate pit or quarry without a permit, contravening the conditions of a licence or a permit, contravening any provision of the Act or regulations, and hindering or obstructing an inspector. The act also creates a new offence of contravening a requirement of a site plan. Although the existing act imposed a duty to operate in accordance with a site plan, it did not explicitly state that failure to do so was an offence. The penalties for contravention of the new act are much more stringent. It proposes a minimum fine of $1,000 a day for operating without a licence or permit and a minimum fine of $200 a day for other offences. The maximum fine of $5,000 a day has not been changed. There is

still a prohibition against any member of the public prosecuting without the consent of the Minister.

Part VIII contains a number of miscellaneous provisions, many of them merely housekeeping matters. The power of the Minister to apply to a court to issue a restraining order when the Act is breached or likely to be breached is essentially the same as in the Pits and Quarries Control Act. The power of the Cabinet to make regulations has been extended to cover the various kinds of decisions that will be made through regulations. In general, the Ontario Cabinet has authority under the act to make regulations "respecting the management of the aggregate and Crown aggregate resources of Ontario", in addition to more specific powers. Section 63 confers upon the Minister of Natural Resources a sweeping power to exempt any licencee or permittee from having to comply with any provision of the regulations. This decision can be made in the absolute discretion of the Minister and it is not subject to any review or any requirement except that he put it in writing.

Existing sites must provide the more detailed site plan required by section 8 and the report required by section 9 even if they already have an approved site plan. However, these need not be submitted to the Minister until either 6 months after the Minister requests them or within 3 years after this act comes into force, whichever occurs first. It would appear from section 64(9) however that an operator who has been issued a wayside pit or quarry permit under the Pits and Quarries Control Act need not reapply for a further permit or submit any site plan or report in order to continue his existing operation.

There are a number of transitional provisions. One which is important, from the standpoint of environmental protection, is that where an application for a licence or permit to operate a pit or quarry has been made under the Pits and Quarries Control Act before this act comes into force, but the Minister has not made his decision whether to issue or refuse the application when the Act is proclaimed in force, the provisions of this Act would apply to the application. Thus, any site plan requirements which are more stringent would have to be complied with. However, these requirements do not appear to apply to Crown aggregates.

BACKGROUND TO THE AGGREGATES ACT

The new Aggregates Act will be administered by the same provincial ministry which we feel has lost credibility because of its failure to enforce the existing legislation. This ministry has no greater duty to take action on violations under the new legislation than it had under the Pits and Quarries Control Act. Its only additional obligation is to inspect each site once a year and to receive the comments of the municipality once every 5 years. Nor is there any provision in the act to ensure that a more adequate enforcement budget will be available to this ministry. The act makes no mention of any role in assessment of site locations or enforcement for the provincial department responsible for environmental protection, the Ministry of the Environment.

The bill is a mere skeleton, to be fleshed out by policies not all of which are yet public, and which are in some cases vague or ambiguous, and by regulations which will be made privately by Cabinet, perhaps in consultation with the aggregate industry, but probably without any scrutiny by the Legislature, municipal councils, conservation groups, or the public.

The effect of this kind of statute depends totally on implementation. To achieve some understanding of how the government intends to implement the Aggregates Act and what it means in practice, it is necessary to read the act in conjunction with the following documents: A Policy for Mineral Aggregate Resource Management in Ontario, the Report of the Mineral Aggregate Working Party; Proposed Policies: Coordinated Program Strategy for the Ministry of Natural Resources in Southern Ontario, April 1979, and the White Paper on the Planning Act, all of which are public; as well as the official plan policies of the Ministry of the Environment and the Ministry of Culture and Recreation, the draft Planning Act, and the regulations that will be made under the new Planning Act and Aggregates Act, none of which are public at the time of writing. Of great importance is a one-page document, the Ministry of Natural Resources Mineral Resources Group's Mineral Aggregate Policy for Official Plans, which was approved by the Deputy Minister April 12, 1979. This document is apparently available from the ministry to those who find out about its existence and request it, but it has not been circulated for comment with the Aggregates Act even though it is crucial to an understanding of the implementation of this act.

To attempt to evaluate the Aggregates Act in the absence of these materials is likely to lead to a very unclear and perhaps misleading conclusion. Despite this,

the Ministry of Natural Resources has asked the public for its comments on the act before September 15. The ministry had asked for comments on the Proposed Policies: Coordinated Program Strategy for the Ministry of Natural Resources in Southern Ontario by July 30, but extended the date to September 30 on the request of municipalities and conservation groups to enable them to coordinate their comments on the Act and Proposed Policies. However, the uncirculated official plan policies are essential for an understanding of the way in which the ministry proposes to implement the rather vague Proposed Policies, the recommendations of the Mineral Aggregate Working Party, and the Aggregates Act.

From a reading of all these documents, it is apparent that the Minister of Natural Resources will have ultimate power to approve any aggregate extraction application and issue a licence or permit, notwithstanding social or environmental concerns or municipal zoning bylaws or official plans. It is contemplated that the ministry will identify sand and gravel deposits, and force each municipality to accept its "fair share" of pits and quarries by refusing to approve official plans that do not designate these areas as "extractive", and by amending them to do so. Public participation and consideration of environmental and planning matters would be curtailed, so that the licencing process could be "streamlined" to reduce the cost of entry into the industry. The Environmental Assessment Act would not apply to aggregate extraction. Local involvement would effectively be limited in most cases to deciding the order in which extractive areas would be developed.

The Report of the Mineral Aggregate Working Party

The Mineral Aggregate Working Party identified many of the deficiencies in the present legal regime, such as lack of enforcement, lack of rehabilitation, and ambiguities in the present Pits and Quarries Control Act. Other problems observed by conservationists, such as the fact that regulation of the aggregate industry is under the control of a division of the Ministry of Natural Resources whose objective is to encourage development of aggregate resources, were not observed by the Working Party. This perhaps reflects the fact that its chairman was the executive director of the Ministry of Natural Resources Division of Mines, its secretary was from the Division of Mines, and members included two past presidents of the Ontario Aggregate Producers' Association.

The working party's articulated solution was to put the quality of life and environmental protection first and, within this "commitment", to ensure that adequate supplies of aggregate resources are made available in a competitive situation in appropriate locations.[58] Its actual recommendations, however,

reveal that this "commitment" to quality of life and environmental protection was to be realized through more stringent regulation of licenced pits and quarries, but did not extend in most cases to denying licences or permits. The working party's consideration of an "appropriate location" for pits and quarries appears to be based on supply, demand, and competition, rather than on consideration of the appropriateness of a location from an environmental or social perspective. The thrust of its recommendations was to remove barriers to licencing, such as municipal and ratepayer objections, while ensuring post-licencing controls on operations that would reduce the nuisance they might cause.

The Mineral Aggregate Working Party felt that, since potentially available resources now identified represent no more than 12 percent of the total resources in southern Ontario, it is necessary to identify and protect for future use "as many of those areas containing potentially available reserves as possible".[59] They believed that while more remote resources might ultimately be available, present levels of demand must be met from the operations in the southern Ontario areas where the extractive industry is already concentrated. They felt that any attempt to shift this pattern to more remote areas of the province would only create further demands and problems elsewhere.

The working party was concerned with maintaining price competition in the aggregate market. Its solution to the need to maintain competition was to increase the access of all producers to high volume markets by seeking better transportation processes and by *"reducing, where possible, the cost of entry into the industry by streamlining, licencing and control procedures"*. (Emphasis added.)[60]

To implement this streamlining process, the working party recommended that the Planning Act be amended to define the making of a pit or quarry to be a use of land within the meaning of section 35 (1) 1 of the Planning Act.[61] If implemented, this recommendation would have allowed municipal councils to pass zoning bylaws prohibiting the making or establishment of pits and quarries within the municipality or within any defined area. However, there is no indication in the White Paper on the Planning Act that this is contemplated.

The working party also recommended that, to avoid duplication of control, the Planning Act be amended to provide that where the new Aggregates Act is in effect, in regions and counties with approved official plans incorporating designated mineral aggregate extraction areas with supporting policies, local zoning bylaws cease to apply to the location and control of pits and quarries.[62] This recommendation

must be read in conjunction with the working party's recommendations that section 35(2) of the Planning Act be amended to remove all municipal power to prohibit pits and quarries in regions and counties with approved official plans incorporating designated mineral aggregate extraction areas with supporting policies and to remove any municipal power to regulate pits and quarries in any municipality of the province coming under the jurisdiction of the new Aggregates Act.[63] As will be discussed below, this recommendation has essentially been accepted by the government, which has chosen to implement it by amending the Planning Act to allow the government to incorporate provincial policies into municipal official plans.

The working party also suggested that since the new act would incorporate strict regulations covering pits and quarries, and control would be exercised through the site plan, sections of the Municipal Act allowing a municipality to pass bylaws to regulate the operation of pits and quarries would be applicable only to areas of the province where the new act is not in effect. Therefore, where a pit has been licenced by the Minister of Natural Resources under the new act, the working party contemplated that the Minister would have an even greater monopoly on enforcement than under the Pits and Quarries Control Act, since the municipality could no longer pass or enforce bylaws regulating the operation. Pits and quarries operators would be subject to regulation effectively only by one level of government rather than two. Protection of environmental and social amenities would be even more dependent than at present upon the will of the provincial government to enforce its legislation. These recommendations appear to have been accepted in part. While the Aggregates Act does not go so far as to eliminate municipal operating standards and enforcement, it does delete the requirement in the Pits and Quarries Control Act that the Minister must refuse to issue a licence where the location contravenes an official plan or a bylaw other than a zoning bylaw. The Aggregates Act also provides that, where its provisions or regulations treat a matter in a different way from provisions of any other act or regulations or any municipal bylaw, the other act, regulations or bylaw will be inoperative. This provision effectively wipes out municipal control over operations together with centuries of common law. Normally, where a municipal bylaw sets more stringent standards than provincial legislation, the stricter requirement must be followed. The provincial standards would supersede the municipal bylaw only if they clearly contradict each other. The Aggregates Act will allow the province to override any municipal standard by establishing a weaker one in its own regulations.

Basic to the working party's proposed approach is "an acceptance of increased resource utilization in the regions closest to markets and an equitable sharing of demand between producing areas".[64] The working party proposed that the Minister of Housing not approve an official plan that did not incorporate sufficient mineral aggregate extraction areas, with supporting policies.[65] "In fact the Minister of Natural Resources should also have the power and authority to order that a municipal official plan or bylaw be amended to allow for aggregate extraction in regional or county municipalities which refuse to accept responsibility for a reasonable output of aggregate."[66] It does not appear that the working party contemplated any appeal from the decision of the Minister of Housing or the Minister of Natural Resources to amend a municipal official plan. However, the working party did recommend two safeguards for local public participation: that in areas where there are suitable official plan designations and policies, the Minister of Natural Resources could delegate his authority to approve licences for new pits and quarries to the region or county; and that the decision whether to issue a new licence would be given to an independent board or tribunal, subject to review by the Minister of Natural Resources.[67] Neither requirement is contained in the Aggregates Act.

Proposed Policies: Coordinated Program Strategy for the Ministry of Natural Resources in Southern Ontario

The Proposed Policies further reinforce the view that the government intends to force municipalities to accept pits and quarries without control over destruction of significant natural areas. The ministry's production target is to ensure that demand for mineral aggregates can be met within southern Ontario to the year 2025. Specifically the target is to ensure that a total cumulative supply of 15 billion tons of sand, gravel, and stone is available, and to ensure the rehabilitation of all lands used for the extraction of aggregates.[68] To accomplish this, the ministry will "identify probable future demands for aggregates and encourage municipalities to identify and protect sufficient aggregate resources to meet local needs and a fair and appropriate share of provincial demand having due regard to municipal concerns and issues".[69] The vague requirement of "due regard to municipal concerns and issues" is subject to the very explicit policy that the ministry will ensure "that municipalities, in the preparation of official plans and zoning bylaws, designate sufficient areas to meet current market demands and protect sufficient mineral aggregate resources to ensure that material is available to meet probable future demands".[70]

Nowhere in the proposed mineral aggregates policy is there any statement that the need to preserve prime farmland or significant natural areas will be given any priority or weight comparable to the need to maintain a supply of aggregates. There is no discussion of other provincial policies for preservation of architectural, historical, archeological or cultural heritage or environmentally sensitive areas, or how they might relate to aggregate extraction policies. When discussing its role in land and water management, the ministry falls back on generalities such as "ensure...coordinated uses of all lands and waters", "ensure a harmonious pattern of uses", and "maintain an acceptable environmental quality".[71] While the ministry may have "due regard" to other concerns, it is clear that it considers aggregate extraction paramount over other land uses.

MNR Mineral Aggregate Policy for Official Plans[72]

The ministry's mineral aggregate policy for official plans states, in part, that aggregates must be available at reasonable cost to the consumer, that licenced pits and quarries must be recognized and protected in official plans, that uses of land which would preclude the possible future use of aggregates should not be permitted in areas of high aggregate resource potential, and that "the Ministry of Natural Resources should have ultimate authority to ensure that adequate supplies of aggregate are available for future use and official plans should not be approved until they ensure that municipalities will have available their fair share of future aggregate supplies".

White Paper on The Planning Act

Under the proposed Planning Act approval by the Minister of Housing will continue to be necessary for official plans when they are first compiled; however, the Minister will usually waive the need to obtain his approval of subsequent amendments that do not affect the provincial interest. The areas of provincial interest will be specified in the act. They will include the provision of an adequate supply of land for all forms of development; the protection of the natural environment and the management of natural resources; and the protection of features of significant natural, architectural, historical or archeological interest.[74] (The report of the Planning Act Review Committee[75] had recommended that conservation of natural resources be included, but the White Paper does not mention conservation of resources). Municipalities would be made aware of matters

of provincial interest through policy circulars which will be issued by the Ministry of Housing alone or in conjunction with other ministries.[76] Municipalities will have to take the policy circulars into account in formulating planning policy. The act will give the Minister of Housing the power to request any municipality to incorporate into its official plan any matter specified by the Minister. If a municipality fails to do this within a specified time period, the Minister will have authority to amend the plan.[77] The Minister of Natural Resources has the authority, under the proposed Aggregates Act, only to "advise" municipalities on the contents of their official plans, and the White Paper does not say that the Planning Act will give the Minister power to amend an official plan as the working party recommended. Nevertheless, it would appear that the Minister will be able to cause an official plan to be amended to order a municipality to accept its "fair share" of pits and quarries, through a combination of the Minister of Housing's powers under the proposed Planning Act to amend an official plan and the Ministry of Natural Resources policies for official plans. Who will determine a municipality's "fair share" is never stated. The decision will have a degree of objectivity as it will depend upon identifying deposits of aggregates throughout the province and evaluating their commercial viability, and on transportation costs. However, where there is a difference of opinion, it seems clear that the provincial government will decide and there will be no appeal from this decision.

AN ANALYSIS OF THE PROPOSED AGGREGATES ACT

The proposed Aggregates Act contains a number of positive new provisions: a fund to pay for rehabilitation of abandoned pits and quarries, greater involvement by regional government, increased inspection, more public participation in the Minister's periodic review of operations, the application of site plan requirements to pits and quarries on Crown lands, definition and clarification of ambiguous provisions of the Pits and Quarries Control Act, and substantial minimum fines for offences.

Despite this, it is clear that the overall effect of the new legislation may be to reduce the need of the provincial government to take into account environmental concerns and the objections of ratepayers' groups and municipal councils to establishment of pits and quarries at inappropriate locations. The Act concentrates tremendous powers and discretion in the provincial government without imposing any corresponding duty to give effect to evidence of social disruption or destruction of significant natural areas. On the face of the Act itself, there are indications that this legislation suffers from many of the deficiencies in the Pits and Quarries Control Act identified by the working party and conservation groups. Like that act, rehabilitation requirements and the establishment of what is acceptable or essential in location or operation of pits and quarries are not supplied in the legislation itself but are found in regulations or policies or are to be a matter of discretion or interpretation by officials of the Ministry of Natural Resources.

A supply of sand and gravel is essential. As aggregates are a nonrenewable resource, although not a particularly scarce one, they should be protected from incompatible development. However, society has other needs as well, which the Aggregates Act all but ignores. The major weaknesses of the Aggregates Act are its failure to provide for conservation of aggregate supplies and its failure to take into account the need to preserve other nonrenewable (and, in southern Ontario, scarcer and therefore potentially more valuable) resources found in the same locations as aggregate deposits: farmland, recreational land, environmentally sensitive areas, and significant features of historical, archeological, architectural, or cultural value.

If we are indeed going to run out of aggregates in the foreseeable future, two strategies are possible: to husband our existing supplies; or, to remove all barriers to utilizing existing supplies, and make available more supplies, until they run out. The Aggregates Act encourages the latter strategy. If, on the other hand

it is only cheap supplies that are scarce, then it is difficult to understand the urgency of pre-empting other important land uses and amenities for gravel extraction. This merely passes on the environmental and social costs to the public and keeps the cost of aggregates artifically low for a time. As the supply near major markets diminishes, the cost of producing them, and therefore the price, rises progressively faster, not only because of demand, but because the cost of producing each unit rises as a resource becomes more difficult to locate and farther from markets; more labour and capital are expended to mine marginal deposits. One would therefore expect the new legislation and policies to give priority to conserving existing supplies to meet future needs. However, throughout the act and above documents, the emphasis is on meeting demand rather than need, and there is little discussion of strategies for reducing demand. The working party's proposals were based upon maintaining a "free market" and changing public perceptions of the industry so that it could expand available resources and prevent shortages without opposition, rather than upon any effort to restrict supply and differentiate between essential and non-essential uses of our limited supplies. Their only recommendation regarding conservation was that more efficient uses of aggregate be investigated close to large urban centers, as well as in areas with potential supply and quality problems. The only conservation strategy mentioned in the Proposed Policies is that the ministry will work with municipalities to conserve aggregates by preventing the use of high-quality resources where lower quality material would be appropriate.[78] No method of implementing this goal is suggested. The White Paper on the Planning Act suggests that the new Planning Act will include a general statement of broad provincial interest to indicate that in reviewing planning applications, the Minister of Housing will ensure that provincial physical, economic and social development policies will not be jeopardized, including "the management of natural resources". The report of the Planning Act Review Committee, upon which this White Paper is based, recommended that the province's interest in municipal planning include the conservation and management of natural resources; however, the word "conservation" has been dropped. MNR's Mineral Aggregate Policy for Official Plans, which, it is understood, will be issued as a policy circular under the new Planning Act, makes no mention of conservation. As mentioned, its goal appears to be to ensure that aggregate is available to meet demand rather than need. Conservation of aggregates is not one of the matters an applicant must address, or the Minister of Natural Resources must consider in a licencing application.

Preservation of environmentally sensitive areas and recreational areas is also given short shrift in the Aggregates Act. As mentioned previously, the Minister's duty in the existing act to have regard to certain environmental concerns has been deleted from the new act. While areas of historical, architectural, archeological and cultural value are recognized in the Ontario Heritage Act, there is no similar protection for environmentally sensitive areas. With one minor exception (the toothless Endangered Species Act) there are no provincial policies or legislation designed to ensure the preservation of natural areas in the way the Aggregates Act and the documents reviewed above are designed to ensure the availability of aggregates. A number of reported court decisions have established that significant natural areas are afforded no protection against applications for development, resource exploitation, public works, and other incompatible uses even when they have been recognized by provincial or federal government agencies as being of regional, provincial or national significance, and not even when they have been incorporated into designated conservation areas[79] or provincial parks.[80]

Moreover, there is no provincial government initiative to identify and classify such areas comparable to the provincial assistance to municipalities contemplated by the Aggregates Act and policies to identify areas of potential aggregate extraction. (The process of identifying environmentally sensitive areas has been left largely to under-staffed and poorly funded local volunteer-based conservation groups and university students.) Therefore, whenever the Ontario Municipal Board or other government agencies consider plans for development which may have an impact upon significant natural areas, they do so in a policy vacuum. The proposed Aggregates Act will intensify this situation, in which policies supporting resource extraction or development cannot be weighed against any counterbalancing environmental protection policies. Even if such policies are subsequently developed by another ministry, the government may not be in a position to accept them without creating a conflict with its existing policies to facilitate aggregate extraction. Therefore, the deletion of the duty, however ineffective, of the Minister of Natural Resources to take into account the preservation of the character of the environment and the availability of natural environment for the enjoyment of the public is an ominous development.

The protection of the natural environment will be recognized in the proposed Planning Act as a broad provincial interest, and the provincial government will have authority to force municipalities to incorporate its environmental

protection policies into official plans. However, as mentioned above, it is anticipated that municipal offical plans will not apply to licenced pits and quarries and that the Minister of Natural Resources will have a right to override any environmental protection policies in an official plan and have the plan amended to incorporate aggregate extraction designations and policies in their stead. Thus, while the province can impose environmental protection requirements on the municipality, the municipality would have no power to implement these requirements when they conflict with a licence issued by the Minister of Natural Resources.

Of further concern is the fact that the act and policies do not appear to envisage any role for the Ministry of the Environment. The provincial agency responsible both for preserving significant natural areas and for regulating resource extraction is the Ministry of Natural Resources. Conservation groups generally believe that, when this ministry faces a conflict between preservation of a significant natural area and resource extraction, it will almost inevitably support resource extraction. The case of the sand dunes at Sandbanks Provincial Park is a significant example of MNR's orientation.[81] MNR administers both the Provincial Parks Act and the Pits and Quarries Control Act. It is responsible for establishing and protecting provincial parks as well as licencing and regulating pits and quarries. Sandbanks Provincial Park was designated as a park under the Provincial Parks Act because of the unique sand dunes found within its boundaries and in the vicinity. The government acquired additional land containing sand dunes adjacent to the park's boundaries with the intention of incorporating these dunes into the park. Any interference with the dunes outside the park's boundaries threatens the integrity of the dunes within the park, as the dunes form a single ecosystem. Nevertheless, the government leased the dunes adjacent to the park for the nominal sum of $1.00 a year to an aggregate company to quarry the sand. The activity was stopped in 1972 only by a public outcry and litigation by environmentalists.

The working party recommended, presumably to avoid overlap and duplication, that pits and quarries be exempted from the provisions of the Environmental Assessment Act. This recommendation was made on the basis of their belief that the new statute they envisaged would contain equivalent environmental requirements. They believed that an application for a new licence would be accompanied by a statement of the environmental impact of the proposed pit or quarry that would result from consideration of all the alternatives concerning the environment, and that the

Ministry of the Environment would work closely with the Ministry of Natural Resources in drawing up the necessary guidelines. No such guidelines have ever been released, nor is there any indication that the site plan required of an applicant will involve consideration of the matters an environmental impact assessment prepared under the Environmental Assessment Act would have to address.

The Environmental Assessment Act does not address the problem of a dearth of provincial environmental protection policies or standards, as it gives no priority to environmental considerations; however, it does provide a framework for identifying environmental concerns and rigorously scrutinizing all feasible alternatives. It also removes the forum for initial decision-making from the political arena to an independent tribunal.

An environmental impact assessment is a study of the effects that a program, project or other undertaking might have on the natural and human environment. It identifies the direct and indirect costs of an undertaking in terms of such things as environmental degradation, use of energy or resources that are nonrenewable, and social disruption, and weighs these costs against the benefits from the project. An adequate assessment under the act must include a description of the purpose of the project or "undertaking", and must describe and explain alternative ways of carrying out the undertaking and alternatives to the undertaking itself. The assessment must describe the environment that might be affected, what the effects might be, and the actions that might prove necessary to prevent or repair environmental damage, not only from the proposed undertaking, but also from its alternatives. The proponent must also evaluate the advantages and disadvantages to the environment of the proposed undertaking and its alternatives.

The definition of "environment" in the act is very broad, including not only the physical environment, but also "the social, economic and cultural conditions that influence the life of man or a community". Thus, social disruption and long-term depletion of energy and resources cannot be ignored under this act. Anyone who wants to proceed with an undertaking designated under this act - generally, one that is likely to have significant environmental or social impact - must first do an environmental impact assessment and submit it to the Minister of the Environment. The Minister must review the assessment and make it available to the public for review, and receive and consider the public's comments. If the Minister on the basis of this review considers the assessment incomplete, inaccurate, or otherwise inadequate, he can refuse to accept it, in which case the project

cannot proceed until the proponent satisfies either the Ministry or the Environmental Assessment Board that the assessment is complete. Any member of the public is entitled to see this completed assessment and to require a hearing before the Environmental Assessment Board both on the adequacy of the assessment document and the wisdom of approving the project. After a public hearing, the board will make a binding decision for or against the project and can impose conditions on its approval. The Minister or the Cabinet can review the board's decision and confirm, vary or reverse it.

Under the Aggregates Act, there is no need for the Minister to notify anyone but the municipal clerk of an application, no requirement that he consider the comments of anyone but the municipal council, no opportunity for review of the adequacy of the documents by anyone other than the Minister before he accepts them as satisfactory, and no need to evaluate environmental impacts or alternatives. The Minister, not an independent board, will make the decision whether to issue a licence or permit, and will have greater discretion than under the existing act to refuse to allow a hearing by the Ontario Municipal Board.

To the extent that official plans and zoning bylaws can be used to control the location and operation of pits and quarries, it is useful also to examine public participation to be allowed under the proposed Planning Act. Here too, the Minister of Housing will have greater discretion than he now does to refuse the opportunity for a hearing by the OMB. Even though the White Paper on the Planning Act acknowledges that the need to revise the Planning Act arises from recent concerns with environmental issues and "a demand for more meaningful public involvement in the making of planning decisions"[82] the White Paper proposes that the new act allow the government to impose pits and quarries on an unwilling municipality through unilateral amendments to its official plan without any opportunity for a public hearing. The current right of members of the public to an OMB hearing on zoning amendments may also be curtailed. Although it is ambiguous, the White Paper appears to say that it will have the right to dismiss an appeal from a municipal decision to zone or rezone without holding a hearing if it is not satisfied with the written reasons an objector has given for wanting one.[83]

There are additional problems with the licencing process. It is difficult understand why an applicant for a licence to excavate less than 20,000 tonnes

of aggregate a year should have to provide the Minister with less information about his operation than an applicant to extract larger quantities each year (but perhaps for fewer years) when they may have similar environmental and social impacts. The former applicant, for example, is not required to describe the water table, the location of wells in the vicinity, whether he intends to excavate below the water table and the maximum depth of excavation, even though he may ultimately dig as deep as the latter applicant, who must provide this information. The site plan of the latter applicant must be certified by a professional such as an engineer or landscape architect, but not that of the former. The ministry appears to have rejected a recommendation by the working party that, while a site plan for a licence of less than 20,000 tons a year need not be prepared by a professional, it must be acceptable to and signed by the municipal engineer.

A small pit, or one which removes small quantities of aggregates each year for many years, may have just as much social and environmental impact as a larger one. The important factor in protecting ground water supplies may not be the number of tons extracted per year, but the depth of extraction. The key factor in determining acceptability of an application is often location rather than size. Surely a pit or quarry to be located near a public school, on a busy highway, or in an endangered species habitat should have to provide just as much information and be planned by professionals just as qualified as a pit or marginal land remote from human habitation.

Nor does the Minister have to take into account the financial responsibility of the proposed operator. As long as the operator can pay his licence fees and rehabilitation security deposit, there may be no further inquiry about his financial capabilities before a licence is issued.

Once a licence has been issued, enforcement of operating procedures and rehabilitation requirements may also continue to be inadequate under the new Act. The working party concluded that a major deficiency in the Pits and Quarries Control Act was lack of enforcement. It attributed this to poor drafting of the statute and regulations, and to insufficient staff. Improvements in the wording of the act, particularly the definition of rehabilitation, may help to alleviate this enforcement problem. However there is no evidence that anything in the act will ensure that the ministry is provided with additional field staff to enforce it. The working party calculated that the minister needed (in 1977) $1.5 million a year to administer its pits and quarries legislation, and suggested

that twenty percent of the licence fee be kept by the province as a contribution towards the planning and enforcment costs of the new policy. Using the working party's figures, the Sierra Club of Ontario has estimated that this would give the ministry a budget for no larger staff than it had at the time.[84] It is impossible to ascertain from reading the new act or any of the other documents reviewed whether there will be any additional enforcement staff or budget. The act does contemplate a substantial annual licence fee. An unknown percentage of that fee will be set aside as a fund for rehabilitation and an unknown percentage will be given to municipalities to assist in defraying costs associated with pits and quarrries. There is nothing in the act to indicate whether any part of the licence fee will be allocated to the ministry for enforcement of operating standards, or the amount of the total fee.

Notwithstanding the conclusion of the working party that the ministry's shortfall in enforcement results from insufficient staff, conservation groups believe that it stems equally from the ministry's attitude. As mentioned, the ministry has essentially conflicting mandates to engage in preservation of natural areas and other aspects of environmental protection and to encourage and facilitate extraction of aggregates. The ministry works very closely with the industry, and it is questionable whether it can be both a helpmate to the industry and its policeman. Evidence that failure to enforce the act results from more than lack of staff can be found in the failure to raise the amount of the rehabilitation security deposit required from operators, which was inadequate to ensure rehabilitation. This would have required only an order in council by Cabinet, and necessitated no additional staff.

Under the Aggregates Act, the same government agency which has been seen to lack credibility because of its failure to enforce the Pits and Quarries Control Act for the past 7 years would be given a monopoly over law enforcement, taking away the centuries-old common law right of private prosecution, which is a basic protection against abuse or derogation of government responsibility. Until recently, the legislatures encouraged such prosecutions as an aid to law enforcement, by providing that any fine levied by the court would be shared with the complainant. This is still the case under the federal Fisheries Act and Migratory Birds Convention Act.

In recent years, governments appear to have developed a growing distrust of sharing their powers with ordinary citizens, although the right of private

prosecution has not generally been abused. J. Neil Mulvaney, Q.C., director of legal services for the Ontario Ministry of the Environment, has acknowledged that private prosecutions under Ontario's Environmental Protection Act have been few and have not posed a problem for the Ministry.[85] However, the Pits and Quarries Control Act and the new Aggregates Act both provide that the public can prosecute offences only with the consent of the very Minister whose own performance has been inadequate.

Moreover, this Minister can override any municipal bylaw by making a regulation with weaker requirements and may with the stroke of a pen relieve any licencee or permitee from the need to comply with any provisions of the regulations.

The annual licence fees, which are intended to be a substantial and a significant source of revenue, and the rehabilitation security payments need not be paid until the end of the operating year, a very unusual arrangement for a licence fee or security deposit. What is to stop the operator from walking away from the site when it is mined out, without paying the licence fee for the final year of operation? Surely the operator who cannot afford to pay his licence fee in installments throughout the operating year is not the kind of person the public wants to operate a pit or quarry. Payments should perhaps be made quarterly. As the fee is to be based on the tonnage extracted, it would be difficult to estimate accurately in advance of extraction; however, if the fee and rehabilitation security are to be paid at the end of the operating year, the act could be amended to require a security deposit to be paid in advance of receiving a licence to be applied to the last year's operations in the event that the operator defaults on payment of his last year's licence fee. At present, the Minister's only power if a licence fee is not paid is to revoke the licence. He has no power to apply any of the sums in the licencee's or permittee's rehabilitation security fund towards payment of the licence fee, even if the amount in that fund exceeds the cost of rehabilitation, admittedly an unlikely situation.

The one-sided decision-making process, lakcing public participation, continues throughout the life of the operation. If the Minister issues or renews a licence, even without a public hearing, or exempts an operator from the regulations, no one has the right to appeal this decision. However, if decisions are taken which adversely affect the operator, in most cases he has a right to appeal to the Ontario Municipal Board and no one - not the municipality, the local conservation authority, or any neighbour - has the right to participate in the

hearing unless granted standing by the board.

A further concern about enforcement is that the new act will not apply to the whole province, but only to those areas already designated under the Pits and Quarries Control Act. The working party concluded that there is a need to designate all the MNR eastern, central and southwestern regions, plus certain urban areas in northern Ontario, to achieve uniform and acceptable standards in major rehabilitation areas, but they found that the ministry was resisting designating areas. If the ministry resisted designations under the existing act, what reason is there to believe it will designate areas under this act as it becomes necessary?

The requirements for rehabilitation of existing and future pits and quarries suffer from the same ministerial discretion and vagueness as other provisions of the Aggregates Act. The act provides that "every licencee and every permittee shall rehabilitate his site in accordance with this Act, the regulations, the conditions of his licence or permit and the requirements of his site plan to the *satisfaction of the Minister*". (Emphasis added.) Fortunately, the Act gives an excellent definition of "rehabilitate", so that it is clear that the concept includes restoration of the land to its previous use or condition, and avoidance of land-use conflicts.

Fortunately, or unfortunately, depending on how the Minister chooses to enforce and implement the act, rehabilitation in any particular case means whatever plans the Minister chooses to accept when he issues the licence, and whatever actions to put those plans into effect will satisfy the Minister.

Although the working party report, the Proposed Policies and the Official Plan Policies suggest that proper rehabilitation is a matter of priority, the act makes rehabilitation plans only one of seventeen items to be included in the site plan of an applicant for a class A licence (fourteen in the case of a class B licence). No separate rehabilitation plan is required, as would be the case in other jurisdictions, such as Alberta[86] and Pennsylvania. Nor is there any requirement that any operator perform progressive rehabilitation. The Minister may impose such a requirement as a condition of issuing a licence or permit, but this is completely discretionary.

The act relies instead on financial incentives, which may or may not prove effective, for progressive rehabilitation. It is impossible to evaluate

whether the provisions for a security deposit to provide for progressive and final rehabilitation are any more adequate than the existing provisions, as they depend entirely upon a formula to be established by regulations, and on implementation of a mechanism to ensure that the sum to be deposited rises with the cost of rehabilitation. There is no reason to believe that the ministry will make any effort to ensure that the security deposit keeps pace with inflation; indeed, there are already indications that the amount will be insufficient. The working party estimated in 1977 that 8 cents a ton would be adequate to cover the cost of rehabilitation.[87] However, the Foundation for Aggregate Studies, an independent research group, estimated at the time that the costs of adequate rehabilitation would be four times as high,[88] Two years later, it appears that the Ministry of Natural Resources is contemplating lowering the amount of the deposit, despite inflation during that period. In March of 1978 the Minister told the Ontario Aggregate Producers' Association that the government was considering raising the deposit from 2 cents a ton to 8 cents, as recommended by the working party.[89] In March of this year, the current Minister, James Auld, told the same group that the government is considering a rehabilitation deposit of 8 cents per tonne or *metric* ton (a tonne is 1.1 tons).[90] The Foundation for Aggregate Studies estimates, that taking inflation into account, this is approximately 2.72 cents a ton in 1971 dollars.[91]

The provisions for rehabilitation of abandoned pits and quarries are subject to the same criticism. Using the working party's figures, the licence fee should generate $300,000 a year for rehabilitation of abandoned pits and quarries. The Sierra Club of Ontario has estimated that, if this were the case, it would take over 6 decades to rehabilitate existing disturbed land, a high percentage of which is abandoned sites.[92] Using the costs of rehabilitation estimated by the Foundation for Aggregate Studies,[93] it would take 240 years to rehabilitate existing abandoned pits and perhaps considerably longer if inflation continues. There is no indication in the act of the amount of the licence fee or the percentage of it to be allocated to municipalities or to rehabilitation of abandoned sites.

Moreover, the proposed fund and licence fee should be available to compensate members of the public who suffer injury as a result of pits and quarries operations, or lack of rehabilitation of abandoned pits and quarries, without having to sue. For example, consideration should be given to ensuring that the fund is available to cover the loss to a parent whose child is drowned in an unfenced pit or quarry, or injured on a rural road by a gravel truck.

To avoid any possibility of confusion, the term "abandoned" in Section 33 should be defined to include pits and quarries abandoned both before and after this act comes into force. The fund should be available not only to rehabilitate "unlicenced" pits and quarries, but also licenced and permitted pits and quarries which have been abandoned with an insufficient sum in the operator's rehabilitation security account to adequately rehabilitate and where the additional sum needed cannot be recovered from the operator through court action.

RECOMMENDATIONS

1. In Ontario, neither the legislature nor the public has any right to review regulations or policies before they are made. In a case like the proposed Aggregates Act, which is virtually meaningless in the absence of the regulations and the policies which will implement it, discussion is a sham without access to these instruments. It is therefore recommended that, before Bill 127 receives second reading, the proposed regulations, the Ministry of Natural Resources's Official Plan Policies, and the Ministries of the Environment and Culture and Recreation's official plan policies should be published in the Ontario Gazette and circulated to municipalities, conservation groups, representatives of the aggregate industry, and other interested persons and 60 days allowed for the public to comment. The committee of the legislature that considers this bill should have this information and the public's reaction to it before debate continues.

2. Because Bill 127 permits the Minister and cabinet to exercise sweeping powers through regulations, including the power to establish licence fees and allocate portions of them for various purposes central to the effective implementation of the act, the power to establish the rate of rehabilitation security payments, the power to override any municipal bylaw, and the power to exempt any operator from the provisions of the regulations, it is essential that proposed regulations be subject to public scrutiny and discussion before they are made final.

3. The act should include a statement as to the need to conserve mineral aggregate resources, the Minister's duty to do so wherever possible, and a list of steps the Minister is authorized to take to further this goal, including refusal to issue a permit or licence unless the applicant has proven the need for his operation and the public interest to be served by it.

4. Section 2 should state that the purposes of the act, in addition to the purposes stated in Bill 127, are to ensure the protection of the environment of Ontario and to provide a right of relief from decisions and activities that do not protect the environment or ensure rehabilitation of areas affected by pits and quarries.[94]

5. The act should provide that it applies to the whole of Ontario except areas exempted from it by regulations, replacing section 5 which provides that the act applies only to those areas designated under the Pits and Quarries Control Act or designated in future by regulations.

6. The applicant for a licence or permit should be required to produce evidence of the public interest to be served and the need to be fulfilled by the operation in its proposed location in addition to any other information it must submit with an application for a licence or permit.

7. The act should require every applicant for a licence or permit to submit to the Minister a rehabilitation plan, including as a minimum requirement the following information:

- a statement of the current official plan designation and zoning and the zoning prior to commencement of operations if the pit or quarry is established;
- a description of the environment of the area affected or likely to be affected;
- the proposed use of the land after rehabilitation;
- the manner in which topsoil and subsoil will be conserved and restored, and if conditions do not allow conservation and restoration of all the topsoil and subsoil, an explanation of these conditions and alternative procedures proposed;
- if the proposed land use following rehabilitation requires compaction of the soil, an explanation of how this will be done;
- a planting program providing for the planting of trees, grasses, legumes and/or shrubs calculated to permanently restore suitable vegetation to the area affected, and if conditions do not allow the planting of vegetation on all the affected area, a description of these conditions and of alternatives proposed, with specific reference to methods of preventing any anticipated soil erosion or siltation of bodies of water;
- a detailed timetable for carrying out each step in the rehabilitation plan, including progressive rehabilitation, and the applicant's estimate of the cost of each step and the total cost of the rehabilitation program.

8. An applicant for a Class B licence should be required to provide the same information as required of an applicant for a Class A licence including the same information in the site plan.

9. An applicant for a Class B licence should be required to have his site plan certified by a professional person or, in the alternative, approved and signed by the Municipal Engineer, as recommended by the working party.

10. In addition to the notice of his application required by section 12 of Bill 127, the applicant should be required to serve notice by mail to every occupant and registered owner of land within two thousand feet of boundaries of the lot or lots upon which he intends to operate a pit or quarry and to all households enumerated on the municipal assessment rolls that are on the proposed local truck routes and alternative routes up to the first limited or restricted

access highway as defined in the Public Transportation and Highway Improvement Act, and notice should be posted in a conspicuous place at the site of the proposed pit or quarry.

11. The act should state the the Minister may not issue a licence or permit where an operation will contravene an official plan or zoning bylaw or may have substantial negative impact upon a feature of significant biological, geological, agricultural, recreational, archeological, architectural, cultural or aesthetic value without first requiring the applicant to submit an environmental assessment in compliance with the Environmental Assessment Act and in such a case all the provisions of that act must be followed with any necessary changes. This would include such matters as review of the assessment by the Minister of the Environment and a hearing by the Environmental Assessment Board if requested by any member of the public. The board would make a decision which would be reviewable by Cabinet.

12. Any Ontario resident should have an absolute right to a hearing before an independent board or tribunal such as the Ontario Municipal Board or the Environmental Assessment Board before a licence or a permit for any pit or quarry, wayside pit or quarry, or Crown aggregate site is issued, subject to penalties which may be imposed by the board by awarding costs against anyone who, without reasonable excuse, requests a hearing but does not attend, or, if he does attend, makes no submissions or arguments, or calls no evidence.

13. The act should require that licence fees, rehabilitation security deposits and approval processes shall be the same on Crown land as on private land, as recommended by the working party.[95]

14. The act should state a minimum sum to be required as rehabilitation security from every operator. Recognizing that the actual costs of rehabilitation may vary considerably from site to site, it should also provide that the actual rehabilitation payment will be based on the actual cost of rehabilitation, as estimated by the Minister, on the basis of the site plan and rehabilitation plan and any other information available to him. The act should include a statement that the minimum and actual rehabilitation security payments will be varied to keep pace with changes in actual costs over time.

If possible, the act should include a formula to be used in calculating increases or decreases in the rehabilitation security payment, based on such factors as changes in construction costs and inflation. Based on U.S. experience, we would recommend a minimum rehabilitation security payment of 35-40¢.[96]

15. The licence fee and rehabilitation security should be paid in regular instalments throughout the year, perhaps quarterly. If they are to be payable at the end of each operating year, then to ensure that the fee for the final year of operation is paid, the Minister should have the right and an obligation to require as a condition of each licence that a security deposit which in his opinion is approximately equivalent to the licence fee and rehabilitation security likely to be paid in the last year of operation be deposited with him. The deposit would attract interest which would be credited to the account of the operator. After deducting the licence fee owing at the end of the final year's operations, and after completion of adequate final rehabilitation, any interest or principal remaining in the account would be refunded.

16. The term "abandoned" in section 33 should be defined. The definition should include pits and quarries abandoned both before and after the act comes into force and should not be limited to "unlicenced" pits and quarries or those without permits. The abandoned pits and quarries rehabilitation fund should be available to rehabilitate both existing pits and those abandoned in future. Licensed or permitted pits and quarries which are abandoned in future, with an insufficient sum in the operator's rehabilitation security account to adequately rehabilitate, and where the additional sum needed cannot be recovered by court action from the licencee or permittee, should also be completely rehabilitated.

17. The act should be amended to state that the Minister may expend any part of the fund for rehabilitation of abandoned pits and quarries to compensate anyone harmed as a result of an abandoned pit or quarry, without proof of fault or negligence of the former operator of the pit or quarry or of the present owner of the land on which the pit or quarry is situated. The act should also provide that the Minister has the obligation to sue anyone who otherwise would have been liable for the harm or injury at common law or under a statute to recover any sum paid out of the fund.

18. The act should state that every licencee or permittee must stockpile substantially all the topsoil on his site, ensure that it is protected from wind drift or erosion, and replace it in accordance with the requirements of his site plan.

19. The working party stated that "we are convinced that there is no point in considering new legislation unless provision is made for sufficient staff to carry out effective consistent enforcement and to provide the liaison and management capabilities to deal with the local public". The act should provide that the Minister shall employ a minimum of one inspector or supervisor for every 80 pits, as this is the number of personnel recommended by the working party.[97]

20. The act should not interfere in any way with the power of municipalities, under the Municipal Act, to impose equal or more stringent standards on the operation of a pit or quarry, and to enforce these standards. Section 61 of Bill 127 should be deleted and the common law principles for resolving conflicts between the legislation of different levels of government should apply.

21. Section 57 providing that no prosecution for an offence shall be instituted without the consent of the Minister should be deleted.

22. The act should require that inspectors must submit a written report following each visit, reporting any observed violations of the act, regulations, site plan rehabilitation plan, licence or permit.

23. Every site inspection report, the annual review of each site plan and the conditions of each licence by the Minister, and the comments of the municipalities submitted to the Minister for his review every fifth year must be available to the public and the public must be allowed to copy them at no more than ten cents a page.

24. The term "sole operator" should be defined.

25. Pits and quarries should be defined as a "use" of land withing the meaning of section 35(1)1 of the Planning Act.

26. Any member of the public should have the same right as the Minister to apply to the courts for an injunction or restraining order.

NOTES

1. The Foundation for Aggregate Studies believes that the aggregate industry, the Division of Mines, and their consultants have overestimated future demand by using absolute forecasting methodology that fails to perceive changes in our economy, and that demand will not reasonably approach supply availability. "Summary of Studies and Recommendations", Foundation for Aggregate Studies (January 1977; revised, October 1978).

2. For example, a Coroner's Jury verdict of September 26, 1978 on the drowning of Todd Rosler recommended that owners of abandoned pits and quarries be responsible for filling them in. Press release by David Warner, M.P.P. (Scarborough-Ellesmere), (July 12, 1979).

3. Ontario Ministry of Natural Resources, Mineral Aggregate Study, Central Planning Region (March 1974), (prepared by Proctor and Redfern); and Mineral Aggregate Study and Geological Inventory, Eastern Region (November 1975), prepared by Proctor and Redfern, Gartner and Lee, Consultants).

4. Correspondance from R.A. Baxter, Director, North Central Region, Ontario Ministry of Natural Resources, to J.F. Castrilli (December 8, 1976); correspondance from J. Viirland, Groundwater Evaluator, Ontario Ministry of Environment, Stoney Creek, Ontario, to J.F. Castrilli (November 26,1976).

5. J.F. Castrilli, Control of Water Pollution from Land Use Activities in the Canadian Great Lakes Basin; An Evaluation of Legislative, Regulatory and Administrative Programs. International Joint Commission (1977) at p. 304.

6. Official Plan for the Regional Municipality of Sudbury (July 1976), (draft).

7. Sandbanks Provincial Park. For further reference: Ron Alexander and Larry Green, A Future for the Sandbanks, Pollution Probe and Canadian Environmental Law Association (1972).

8. In 1978 the Minister of Natural Resources issued a licence to Pelee Island Quarries Inc. despite a request by the Canadian Environmental Law Association and the Federation of Ontario Naturalists that the Minister await the result of a hearing before the Ontario Municipal Board as to the Official Plan designation of this site. The Wildlife Branch of the Ministry was also about to undertake studies to determine the extent of endangered species habitat in the vicinity.

9. D. Fahselt, P. Maycock, G. Winder, and C. Campbell (1979), "The Oriskany Sandstone Outcrop and Associated Natural Features, a Unique Occurrence in Canada", Canadian Field Naturalist 93 (1):28-40.

10. Township of Uxbridge v. Timbers Brothers Sand and Gravel Ltd. (1975) 7 O.R. (2d) 484 (C.A.); Pickering Township v. Godfrey (1959) O.R. 429 (C.A.)

11. Uxbridge v. Timbers Brothers, op. cit. note 10.

12. Ibid.

13. Re Preston Sand and Gravel Company Ltd. (1975) 5 OMBR 209.

14. Op. cit. note 10.

15. Op. cit. note 13.

16. Re.Horan and Minister of Natural Resources (1974) 3 O.R. (2d) 533 (Div.Ct.)

17. Op. cit. note 5 at p. 300.

18. Ibid, p. 300.

19. Ibid, p. 298.

20. Ibid, p. 288.

21. Ontario Ministry of Natural Resources, A Policy for Mineral Aggregate Resource Management in Ontario, Report of the Mineral Aggregate Working Party (December 1976) p. 57.

22. Ibid, pp. 55-6.

23. White Paper on the Planning Act, Government of Ontario (May 1979) p. 135.

24. (1866) L.R. 1 Ex. 265, affirmed (1868) L.R. 3 H.L. 330.

25. Walker v. Pioneer Construction Co. (1967) Ltd. (1975) 8 O.R. (2d) 35.

26. Muirhead v. Timbers Brothers Sand and Gravel Limited et al., Unreported (July 29, 1977) S.C.O. per Rutherford, J.

27. National Capital Commission v. Pugliese (1979) 8 CELR 68.

28. Jackson v. Drury Construction Co. Ltd. (1975) 4 O.R. (2d) 424; (1974) 3 CELN 43.

29. See, for example, Penno v. Government of Manitoba (1975) 64 D.L.R. (3d) 256; (1976) 5 CELN 114.

30. Note 25 and 26.

31. Millar vs. Ministry of Natural Resources and Preston Sand and Gravel Ltd. (1978) 7 CELR 156.

32. Note 11.

33. Re. Starr and Township of Puslinch (No. 2) (1977) 160 O.R. (2d) 316.

34. Note 3.

35. Op cit. note 21, p. 4.

36. Ibid, p. 3.

37. Ibid, p. 5.

38. Ibid, p. 5.

39. Ibid, p. 5.

40. Ibid, p. 5.

41. Ibid, P. 5.

42. Ibid, pp. 5-7.

43. Sierra Club of Ontario, Response to "A Policy for Mineral Aggregate Resource Management in Ontario", submitted to the Minister of Natural Resources May 24, 1977.

44. Estrin, D. and J. Swaigen, ed. Environment on Trial, Canadian Environmental Law Research Foundation, second edition, 1978, pp. 212-224.

45. Note 8.

46. Op. cit. note 21, pp. 60-61, 65-67.

47. Op. cit. note 44, p. 218.

48. Op. cit note 21, p. 3.

49. W. E. Coates and O. R. Scott, A Study of Pit and Quarry Rehabilitation in Southern Ontario, Ontario Geological Survey Miscellaneous Paper No. 83 (1979)

50. Op. cit. note 21, p. 65.

51. Op. cit. note 5, p. 303.

52. Correspondence from J. R. Oatway, Director, Northern Region, Ontario Ministry of Natural Resources, Timmins, Ontario, to J. F. Castrilli (January 12, 1977).

53. Op. cit. note 21, p. 77.

54. Op. cit. note 5, p. 303.

55. Ibid. The Working Party Report states, for example, "If public perceptions can be changed to find the industry acceptable, the available resources could expand significantly".

56. Explanatory Notes, Bill 127, 3rd. Session, 31st. Legislature, Ontario.

57. Op. cit. note 21, p. 77.

58. Ibid, p. 5.

59. Ibid, p. 27.

60. Ibid, P. 29.

61. Ibid, p. 52.

62. Ibid, p. 53.

63. Ibid, p. 53.

64. Ibid, P. 36.

65. Ibid, p. 41.

66. Ibid, p. 36.

67. Ibid, pp. 40-42.

68. Ontario Ministry of Natural Resources. Proposed Policies: Coordinated Program Strategy for the Ministry of Natural Resources in Southern Ontario (April 1979) at p. 13.

69. Ibid, p. 15.

70. Ibid, p. 15.

71. Ibid p. 5. The document states at p. 39 that "Specific targets have not yet been developed for the land and water management program".

72. Ministry of Natural Resources Mineral Resources Group, Mineral Aggregate Policy for Official Plans, approved by Dr. G. K. Keynolds, Deputy Minister (April 12, 1979).

73. Government of Ontario, White Paper on The Planning Act (May 1979), at p. 40.

74. Ibid, p. 36.

75. Report of the Planning Act Review Committee, Eli Comay Chairman, Government of Ontario (June 1977), see page 35, op. cit. note 73.

76. Op. cit. note 73, p. 37.

77. Ibid, p. 41.

78. Op. cit. note 68, p. 15.

79. See for example Rosenberg v. Grand River Conservation Authority (1976) 12 O.R. (2d) 496 (C.A.)

80. See for example Green v. the Queen in Right of Ontario (1973) 2 O.R. 396 (High Court).

81. A Future for the Sandbanks, op. cit. note 7.

82. Op. cit. note 73, p. 20.

83. Ibid, p. 117.

84. Op. cit. note 43, p. 11.

85. Correspondence from J. Neil Mulvaney, Q.C. and remarks at the 1978 Annual Meeting of the Canadian Environmental Law Association.

86. Alberta Land Surface Conservation and Reclamation Act, Alberta Regulation 125/74 as amended by 56/76, s. 33.

87. Op. cit. note 21, p. 65.

88. Foundation for Aggregate Studies, Summary of Studies and Recommendations (January 1977, revised October 1978). This figure of $4,000 to $6,000 per acre, which was the Foundation's estimate for cost of rehabilitation in 1977 was revised to $4,840 to $7,260 in October of 1978.

89. "Ontario quarry act amendment would increase aggregate price", Lawrence Welsh, Toronto Globe and Mail (March 3, 1978).

90. Background, Ontario Ministry of Intergovernmental Affairs, volume 79/11, p. 8.

91. Conversation with Joyce Collier (August 1979).

92. Op cit. note 43, p. 11.

93. Op. cit. note 88. This is based on the 1977 estimate of costs. Using FAS's 1978 estimate the time for rehabilitation would be longer.

94. The wording of this recommendation, as well as the wording of recommendations 7, 10, 15, and 19 is based in part on provisions of a proposed Pits and Quarries Control and Rehabilitation Act submitted in 1979 to the Minister of Natural Resources by the Foundation for Aggregate Studies.

95. Ibid, p. 58.

96. The United States Surface Mining Control and Reclamation Act, U.S. Public Law 95-87 requires mining companies to pay a levy of 35 cents per ton on surface mined coal. The fee must be paid quarterly and infractions result in fines of up to $10,000.

97. Op. cit. note 21, p. 66.

APPENDIX

Ministry of Natural Resources
Mineral Resources Group

MINERAL AGGREGATE POLICY FOR OFFICIAL PLANS

1. That all parts of the Province possessing aggregate resources should share the responsibility for future demands; at first approximately in proportions existing under present market patterns until new long term sources of supply can be made available based on efficient long distance transportation systems;

2. That aggregates must be available at reasonable cost to the consumer including environmental, transportation and energy costs;

3. That licensed pits and quarries under provincial legislation must be recognized and protected in official plans;

4. That the Province provide municipalities with the basic surficial geological information on the location and extent of potential mineral aggregate deposits including stone, sand and gravel;

5. That the Province in cooperation with the municipalities must identify areas of high aggregate resource potential and define these areas required for possible future extraction adequate to meet future provincial demands;

6. That the identification, designation and protection of high aggregate resource potential areas should occur jointly by regional/county and local official plans;

7. That uses of land which would preclude the possible future extraction of aggregates should not be permitted in required areas of high aggregate resource potential. Prohibited uses would include residential, commercial and industrial development. Other land uses would be permitted such as agriculture and forestry;

8. That because of time and cost constraints, there should be special approval procedures for wayside pits and quarries, therefore policies should be included in official plans to allow the opening of wayside pits and quarries without amendment to the plan or its implementing zoning by-laws;

9. That the Ministry of Natural Resources should have ultimate authority to ensure that adequate supplies of aggregate are available for future use and official plans should not be approved until they ensure that municipalities will have available their fair share of future aggregate supplies;

10. That the Province requires rehabilitation of land after excavation either through restoring the land to its former use or condition or to another use or condition that is or will be compatible with the use of adjacent land.

Approved by:
Dr. J. K. Reynolds
Deputy Minister
April 12, 1979

The Authors

Joseph F. Castrilli has published a number of papers on aspects of environmental and natural resources law and policy, on topics such as environmental impact assessment, regulation of Great Lakes water quality, and mining. His study for the International Joint Commission entitled ' An Evaluation of Canadian Legislature, Regulatory, and Administrative Programs' contains extensive material on extractive operations.

John Swaigen is a graduate of the University of Toronto and Osgoode Hall. He has served as General Counsel and Director of the Legal Aid Clinic, and been active in litigation, promotion, and fund-raising for a variety of environmental protection projects. His publications in the area include Environment on Trial: A Citizen's Guide to Environmental Law, and numerous monographs and studies. Mr. Swaigen is presently General Counsel for the Canadian Environmental Law Association.

CANADIAN ENVIRONMENTAL LAW RESEARCH FOUNDATION

Founded in 1970, the Canadian Environmental Law Research Foundation (CELRF) was formed to promote, through legal channels, standards and objectives that will ensure the maintenance of environmental quality in Ontario and throughout Canada. Through a variety of research studies, regular publications, and legal education projects, CELRF promotes the need for thorough planning and assessment of all environmentally sensitive projects, public input into environmental decision-making, and the preservation of strategic and significant natural areas.

CELRF's recent publications include 'Environment on Trial', a citizens' handbook on federal and Ontario environmental law (2nd edition, 1978). This book describes ways in which the public can use legal mechanisms to promote environmental protection and to solve a wide variety of local environmentl problems. CELRF has also published a handbook on the preservation of natural ares using legal mechanisms in Ontario, a major commentary on Bill 24 concerning liability for spills of hazardous and toxic substances (Ontario), and is currently preparing to publish two model tree protection bylaws for Ontario municipalities.

Beginning in the fall of 1979, CELRF will offer a legal information package containing a wide variety of legal research studies, reported cases, and other data promoting environmental protection.

THE CENTRE FOR RESOURCE STUDIES

The Centre was established in 1973, under the sponsorship of Queen's University, the federal Department of Energy, Mines and Resources, and The Mining Association of Canada, to carry out a program of research and publication on mineral policy issues. Mineral resources considered by the Centre include metallic, industrial and non-metallic, and structural minerals, but exclude petroleum and natural gas.

The Centre provides opportunities for multidisciplinary research in resource studies at Canadian universities, furnishes reliable information on matters related to mineral resource policy, and promotes closer liaison between government, industry and other concerned groups. The Centre's publications employ non-technical language, so far as the subject allows, to enhance their value to non-specialists. The main research program is carried out both at the Centre and by means of contracts with qualified investigators, usually at Canadian universities, while small exploratory studies are funded through a system of grants-in-aid of research. CRS Policy Discussion Seminars involve representatives from governments, industry, universities, labour, and other interested groups in constructive working sessions on issues of current concern. Seminars are held three or four times each year. Through these programs, and the resulting publications, the Centre hopes to contribute to informed discussion of the issues.

The Centre is governed by a board of directors which decides general policy and establishes priorities for research. The Chairman is Mr. R.J. Hand, and the executive director is Dr. C.G. Miller. There are fourteen other members — seven nominated by Queen's University, four by The Mining Association of Canada, and three by the federal government. Guidance on the research program, together with discussion of policy issues and other matters, is provided by the Advisory Council. This body comprises all researchers associated with the Centre, together with members appointed from such groups as governments, industry, labour, and consumers. Committees of specialists aid in the development of projects and the selection of research proposals, and advise on the progress of the research. The executive director and staff are responsible for the work of the Centre within this framework.

The Centre welcomes comments on its publications, proposals for research projects or for publication, or enquiries about any aspect of its work.

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