

#111

**SUBMISSION ON THE PROPOSED REVISIONS  
TO THE MINING ACT, R.S.O. 1980  
c.268 (excepting Part IX)**

to

The Minister of Natural Resources  
The Honourable Alan W. Pope

BY: Frank Giorno  
Research Director  
Canadian Environmental  
Law Association

**February 1983**

# TABLE OF CONTENTS

		PAGES
I.	INTRODUCTION	1-2
II.	ENVIRONMENTAL IMPACTS OF MINING ACTIVITIES	2-3
III.	THE PROPOSED REVISIONS TO THE MINING ACT	3-4
IV.	PROBLEMS WITH THE EXISTING MINING ACT	4-5
V.	RECOMMENDATIONS	5
	A. <u>Environmental Protection</u>	
	1. Statement of Purpose Recognizing the Need for Environmental Protection	6
	2. Substantive Environmental Protection	7
	B. <u>The Incorporation of Planning Requirements in a Revised Mining Act</u>	7-8
	1. An Inventory of Mineral Resources	8
	2. "Mining Lands" Designation Through Regional Planning	9
	3. Mining Companies Must Submit Plans for Approval	9
	C. <u>Precedents Recognizing Planning Principles</u>	10
	1. MNR Recognizes Planning Principles: The Strategic Land Use Plans	10
	2. Ontario's Pits and Quarries Control Act	10-12
	3. British Columbia's Mining Regulations Act	13
	4. The Alberta Land Surface Compensation Act	13
	5. The Ontario Crown Timber Act	14
	6. The British Columbia Forest Act	14
	D. <u>The Principles of Public Participation Should be Incorporated in a Revised Mining Act</u>	15
	1. Notice Should be Given to Interested Parties	15
	2. Reasons Why Public Participation is Necessary	16
	E. <u>Precedents Recognizing the Principle of Public Participation</u>	16
	1. Public Participation Required in the Past for Certain Mining Projects	16-17
	2. Precedents for Public Participation in the Forest Industry	17-18
VI.	CONCLUSIONS	18-21
VII.	FOOTNOTES	22-24

## I. INTRODUCTION

The Canadian Environmental Law Association, founded in 1970, is a public interest environmental law group committed to the enforcement and improvement of environmental laws.

Public land use and resource development issues, which are affected by provincial legislation such as the Mining Act, have been a major focus for CELA and its sister organization the Canadian Environmental Law Research Foundation (CELRF).

In 1979, CELA, in association with the Centre for Resource Studies (Queen's University) published The Proposed Ontario Aggregates Act: Discussion, Evaluation and Recommendations. A submission on the proposed Aggregates Act, 1979 (Bill 127) was presented to the Standing Committee on Resources Development in 1980.

Also in 1980, CELRF presented a brief to the Royal Commission on the Northern Environment, in which the Mining Act and other MNR land use legislation was reviewed. The brief, entitled The Legal and Administrative Basis of Land Use and Environmental Decision-Making North of Latitude 50°: A Guidebook and Selected Observations, made the following recommendations:

- MNR should determine the long-term public interest in an accessible, open and comprehensible forum and provide standards and procedures for effective public participation;

- The MNR should modernize the legal instruments which it uses to plan, zone and dispose of land and minerals;
- The Ministry of Natural Resources must assert the priorities of ecological protection;
- MNR projects and private developments on public lands should be reviewed under the Environmental Assessment Act to ensure that larger decisions of programs and planning are exposed to meaningful and guaranteed public input; and
- Efforts should be undertaken to eliminate the Ministry of Natural Resources' often contradictory dual role of protector and developer of public lands.

## II. ENVIRONMENTAL IMPACTS OF MINING ACTIVITIES

The mining industry has made significant contributions to employment and economic growth in Canada. Ontario, the leading mineral producing province, has benefited tremendously from the mining industry. However, mining causes severe environmental problems. The industry was responsible for 25% of total air pollutant emissions recorded in Canada during the 1970s.<sup>(2)</sup> Water resources have been contaminated by acid mine drainage containing significant amounts of dissolved metals.<sup>(3)</sup> Mineral extraction generates a significant quantity of waste ores. In Ontario, about 80 million tons of mining wastes are generated annually and disposed as tailings.<sup>(4)</sup> The disposal of tailings requires large areas of land (on the average of 210 square miles per ton). In addition, tailings piles are subject to wind and soil

erosion and residues may leach into nearby groundwater systems,<sup>(5)</sup> or bodies of surface water. In some cases, mining companies<sup>(6)</sup> have sought the right to dispose of mine tailings in water. The type of impacts from mining vary considerably with the ore composition, and mining methods, but nonetheless, mining generates a number of adverse impacts on man, wildlife and vegetation.

A conflict exists between society's need to extract minerals and the need to respect the needs of the surface rights holder, adjacent property owners, nearby communities and all others who may be affected by the adverse local and regional impacts produced by the mining industry. Instead of exacerbating these conflicts, mining legislation should try to ameliorate them.

Mining legislation should provide thorough consideration of all relevant issues before permitting mining activities to proceed. It should aim to minimize adverse social and environmental impacts, protect significant natural areas and water resources, and provide for public participation. It should also provide adequate enforcement mechanisms, and adequate provisions for rehabilitation of mining lands.

### III. THE PROPOSED REVISIONS

The proposed revisions of the Mining Act are based on representations made by the mineral industry to MNR. The discussion paper entitled the Proposed Revision of the Mining Act R.S.O. 1980, c.268 (excepting Part IX) states the rationale motivating the revisions as being the desire of the mineral industry to streamline the Act in order to keep pace with exploration technologies developed by the industry

(7)  
 in recent times. An explanation of what the new exploration technology consists of and how the proposed changes aid its implementation is not provided in the discussion paper.

The recommended changes are to be incorporated into either a new Mining Act or a revised Mining Act and are designed to enable individual prospectors and exploration and mining companies to operate in Ontario more expeditiously and with less interference by regulations. Most of the changes deal with the procedures for: obtaining licenses, staking mineral claims, acquiring rights of access, evaluating assessment work credits, taxation of mineral rights.

CELA's concerns go beyond matters touched on in the proposed revision and we feel that if the Act is to be revised, this is the best time to address the entire rationale for the Act and present our views on the revisions.

#### IV. PROBLEMS WITH THE EXISTING MINING ACT

The Mining Act allows the MNR to issue licences, permits, leases and patents which grant a company or an individual the right to explore, mine and refine minerals on Crown lands and on lands on which the mineral rights are retained by the Crown. Based on a philosophy which views mining as an important economic activity that has priority over other land use considerations, the current Mining Act encourages mining developments wherever significant mineral deposits are found regardless of the surface use. (8) The Act allows for quasi-expropriation of any adjacent lands deemed necessary to mining operations. (9) The assumption in Ontario's mining

legislation is that planning cannot be practiced because minerals must be taken where they are found, and that the extraction of minerals supersedes any other use to which land may be put. (10)

Although a significant portion of mining activity takes place on Crown lands, the public plays no role in determining how Crown land should be developed. The Mining Act contains no provisions for giving notice to the general public of decisions made pursuant to it. (11)

Participation in Mining Act decisions is restricted to hearings before the Mining Recorder and the Mines and Lands Commissioner in situations where there is a dispute between parties who have an economic interest either in the staking of a claim or the use of adjoining surface rights. (12)

#### V. RECOMMENDATIONS

The proposed revisions deal mainly with changes to the procedure for licencing, acquiring, recording, and taxing of mineral claims. They do not address several key items which we feel should be included in a revised Mining Act. Our submission therefore will focus on the need to introduce the principles of public participation, planning and environmental protection in a new or revised Mining Act. In addition, we would recommend that mining projects (private and public) be subject to the Environmental Assessment Act.

A. Environmental ProtectionI. Statement of Purpose Recognizing the Need for Environmental Protection

The current Mining Act does not contain a statement of policy or purpose. A revised Mining Act should contain a statement of purpose including protection of the environment as well as the need to promote the orderly development of mining projects. The Act should discourage mining practices that cause large-scale ecological and social disruption.

Mining is an important economic activity, but it must be pursued in a manner consistent with the goal of protecting the environment. There is widespread support for this view. The Mining Association of Canada wrote the following in recognition of the mining industry's interest in reducing environmental damage:

In developing a mineral deposit, mining it and processing the ore, the immediate environment will be disturbed to some extent. However, there are ways of minimizing this disturbance - many developed and put into practice years ago, others now being implemented, and still others undergoing research and testing...

The Canadian mining industry is currently discussing means to reduce any interference with natural water sources and the environment with the federal and provincial governments.(13)

A model purpose section would be from the Alberta Coal Conservation Act, the purpose of which is to ensure the economical development of Alberta's coal resources, and also the conservation of the environment through the control of pollution.  
(14)



## 2. Substantive Environmental Protection

We would submit that provisions should be enacted which deal with the protection and rehabilitation of the environment. Revisions along this line could be modelled on the British Columbia Mining Regulations Act. The purpose of the Mining Regulations Act is to preserve the natural environment through the reclamation of mining property. (15)

Under that legislation, it is the duty of the owner to be responsible for the protection and reclamation of the surface of the land and watercourses near the operation of a mine. (16) It is the owner's responsibility to leave the land and watercourses in a condition satisfactory to the Minister.

In addition, during the entire period of production from the mine, the owner must continually and progressively reclaim the surface of the land affected by the mining operations. (17) Failure to comply gives the Minister the power to impose penalties or order the operation closed. (18)

### B. The Incorporation of Planning Requirements in a Revised Mining Act

The orderly development of natural resources and the discouragement of wasteful mining projects should be addressed through the introduction of sound planning principles. It is essential that there be some form of planning in order to minimize land use conflicts by specifying which areas in the province are suitable for mining and which are not.

The current Mining Act does designate certain areas that are not open to mining, but these designations can be reversed by regulation

or order from the Cabinet, the Minister or even the Mining and Lands  
(19)  
Commissioner as the case may be, without notice or public input.

The Wilderness Areas Act<sup>(20)</sup> and the Provincial Parks Act<sup>(21)</sup>  
also restrict mining activity in certain parts of the province. However,  
these Acts are either unenforceable or their provisions can be easily  
overridden by regulation, without notice or an opportunity for public  
input.

The Environmental Protection Act and the Ontario Water Resources  
Act require Certificates of Approval for any activity that involves  
(22)  
the discharge of contaminants into the environment. A company  
must submit plans, specifications, and an engineer's report of the  
(23)  
planned tailings disposal system. The Director of Approvals may  
also consider the location, nature, possible duration of mining opera-  
tion, the extent of land that may be affected by the disposal of  
(24)  
tailings, and the population of neighbouring lands. In addition,  
public hearings may be held if the project crosses into municipal  
boundaries. There is no statutory requirement to notify nearby resi-  
(25)  
dents.

Existing legislation lacks the provisions recommended below:

I. An Inventory of Mineral Resources

A full inventory of mineral resources should be undertaken so that  
an adequate data base will be available for meaningful planning.  
The data can be gathered and compiled by an expansion of the work  
already done by the Ontario Geological Survey, and also through  
the information filed on past prospecting activities in the province.

2. "Mining Lands" Designation Through Regional Planning

The first level of planning should be the submission of regional plans by MNR identifying and zoning lands that are suitable for mining activity. The public should be fully involved in developing the MNR plans. These regional plans should be submitted for approval in a public hearing, in which interested parties are able to present their views on whether or not the plans should be accepted, rejected or amended.

3. Mining Company Must Submit Plans for Approval

Mining exploration and development activities would be permitted in lands designated for mining.

As a second level of planning, mining companies operating within lands zoned for mining should be required to submit for approval and prior to commencing work, plans outlining their development, operating and reclamation procedures. These plans should be submitted for approval to a public hearing and interested parties given the opportunity to comment on the plans. A Hearing Board would then decide to accept, set conditions, reject or amend the plans.

The need for such planning would apply mainly to the development of a mine, but could also apply to exploratory activities if they are deemed to hold the potential for damaging environmentally sensitive lands or watercourses. The approval to commence development of a mine would be granted upon acceptance of the company's plans. Precedents for the use of planning principles in natural resource legislation exists throughout Canada.

C. Precedents Recognizing Planning Principles

I. MNR Recognizes Planning Principles: The Strategic Land Use Plans

The Ministry of Natural Resources has acknowledged the wisdom of land use planning and put it into practice through the Strategic Land Use Plans. The Strategic Land Use Plans could be used as a model for regional planning of mining activities if their deficiencies are corrected. As presently constituted, the Strategic Land Use Plans do not have statutory backing. (26) Plan approval is given through an internal process by MNR. (27) There are no provisions for allowing the public to request a hearing, and generally the public does not have the same right to participate in the approval process as they do under the Planning Act. (28)

2. The Ontario Pits and Quarries Control Act

The Ministry of Natural Resources also recognizes the principle for planning prior to developing a natural resource in legislation which it administers. Under the Pits and Quarries Control Act, an application for a licence to operate a pit or a quarry must be accompanied by a site plan which must include: (29)

- the location, contours, dimension, acreage and description of the land to be used for a pit or a quarry;
- The use of all land, the location and use of all buildings and structures lying within a distance of 500 feet of the site boundary;

- drainage provisions;
- the intended use and ownership of land after the extraction operations have ceased; and
- cross-sections where necessary to show geology, progressive pit development and ultimate rehabilitation of the site.

Under the Pits and Quarries Control Act, the licensee is subject to annual review by MNR to assess compliance with this Act, the (30) regulations, the site plan and terms and conditions of the licence.

Section 6 of the Pits and Quarries Control Act, gives the Minister the power to refuse to issue a licence where in his opinion the operation of a pit or a quarry would be against the public interest, taking into account: the preservation of the character of the environment; the availability of natural environment for enjoyment of the public; (31) possible effect on the watertable or surface drainage pattern.

Unlike the Mining Act, the Pits and Quarries Control Act contains (32) provisions for public notice for the licensing of a new pit or quarry and an application for a licence to operate a pit or a quarry can (33) be challenged at an Ontario Municipal Board Hearing.

Despite these provisions, the Pits and Quarries Control Act has several defects, some of which were identified by a provincial working party established in 1975 to advise the government of Ontario on mineral aggregate policy. Among other things, the working party reported that (34) the Act lacked credibility because:

- regulations under the Act are seldom specific enough to create a legally enforceable obligation on any particular operator;
- even if the Act had been drafted more specifically, it would not have been enforced because MNR policy favours maximum utilization of available aggregate resources over environmental protection;
- rehabilitation requirements are frequently not identified on site plans;
- the Act has not been applied to the whole province, but only designated areas.

Consequently, considerable conflict has resulted because of the deficiencies of the Act between, for example, neighbours and gravel pits operators; and municipalities and gravel pits operators. (35)

Revisions to the Mining Act should avoid the deficiencies observed in the Pits and Quarries Control Act.

Sadly, the Mining Act has even less control over mining activities than does the Pits and Quarries Control Act over pits and quarrying activity. (36) Under the present Mining Act, no site plans are required, nor are public hearings, adequate rehabilitation plans, the recognition of environmental protection, or adequate security deposits to cover the costs of rehabilitation.

Unlike Ontario's Mining Act, some Canadian provincial mining legislation does include planning requirements.

### 3. British Columbia's Mining Regulations Act

Legislation under British Columbia's Mining Regulations Act requires that a mining company must file prior to commencing preparatory work for production of a mine, a report showing the company's reclamation plans. (37) The Minister must publish notice of the filing of the report in the B.C. Gazette and a local newspaper. (38) He is also required to hear representations from other provincial ministries affected by the report and from any other persons in any way affected by the programme. (39) The Minister may approve, reject or revise the report. A licence to commence a mining project will be issued once the reclamation plans are accepted. Although this Act does not entirely meet our concerns, it too has more control over mining activities than does the present Mining Act in Ontario.

### 4. The Alberta Land Surface Compensation Act

Legislation in place in Alberta requires the submission of an environmental impact statement if an activity is deemed to be damaging to land surface. For any land in Alberta, whenever it is proposed to do anything (including mining) which (in the opinion of the Minister of the Environment) is likely to result in surface disturbance, the proponent may be ordered to prepare and submit an assessment of the environmental impact of the operation. The proponent is to assess the conservation, utilization, and management of natural resources; suggest methods for the prevention or control or pollution ; cite the economic factors affecting his ability to carry out mitigative measures; and the preservation of resources for their aesthetic value. (40)

5. Ontario's Crown Timber Act, R.S.O. 1980

Elements of planning are also required under the MNR's Crown Timber Act.<sup>(41)</sup> Timber companies party to forest-management agreements must file with the Minister annual plans, regeneration agreements,<sup>(42)</sup> operating plans and management plans. Although presently under interim exemptions, forest management agreements are subject to the Environmental Assessment Act.

6. The British Columbia Forest Act

In British Columbia, under the Forest Act's provisions for tree-farm licences, the chief forester must approve a management and working plan before a licence can be issued.<sup>(43)</sup> The holder of the licence must harvest timber in accordance with the terms set in the tree-farm licence and the working plans. Similar provisions exist in the Forest Act pertaining to pulpwood agreements.<sup>(44)</sup> A licensee must submit a management and working plan every five years.<sup>(45)</sup> The British Columbia legislation contains provisions for notification through public advertising and for public hearings.<sup>(46)</sup>

A survey of natural resource legislation in Canada indicates that planning has been recognized as a beneficial component for the administration and regulation of land uses on Crown land. The Province of Ontario itself has explicitly recognized the value of natural resources planning in the Pits and Quarries Control Act, the Crown Timber Act, and the Strategic Land Use Plans. The addition of planning requirements to mining legislation in Ontario therefore would be a logical and reasonable extension of a valuable principle which the province of Ontario has already enacted in several of its natural resources statutes.



D. The Principles of Public Participation Should be Incorporated with Respect to Mining Activities

The public must be involved in the approval process for the regional plans and the company plans.

In order to participate effectively in a public hearing copies of plans, supporting documents and government reviews of the environmental assessment should be made available to all interested parties, with sufficient time to prepare for a hearing.

I. Notice Should be Given to Interested Parties

Sufficient advance notice of the following activities and procedures should be given to all interested parties:

- the intention of developing a mine for production;
- the completion of plans;
- the completion of government review;
- notice of the deadline for comment on company plans and the government review;
- notice of a hearing date;
- notice of Board's decision;
- notice of approval; and
- notice of the Minister's decision.

The latter seven provisions would apply for both the regional planning process and the site specific planning process. The first provision would apply only to the site specific plans.

## 2. Reasons Why Public Participation is Necessary

Public participation is necessary because it would enable parties who have an interest in future development of Crown lands to be heard. This is especially crucial for residents north of 50° latitude who live in unincorporated areas where mining activities take place, and who are at a disadvantage because they do not have the same rights as ratepayers residing in incorporated municipalities. (47)

### E. Precedents Recognizing the Principle of Public Participation

#### I. Public Participation Required in the Past for Certain Mining Projects

With respect to public participation in mining developments on Crown lands, there have been situations where the government of Ontario required that environmental assessments be submitted and public hearings held. The Onakawana Development Limited's proposed lignite coal strip mine in the James Bay Lowlands, a private sector development, was designated under the Environmental Assessment Act in 1978. (48)

Although a hearing was not mandated for the Onakawana Development, MOE guidelines strongly recommended a public participation programme for native and non-native people living in the area. (49) An environmental assessment was never submitted because Onakawana Development Ltd. decided not to proceed with their plan when their prime buyer, Ontario Hydro, announced it would not construct a coal-fired power plant.

In another case, the expansion of uranium mining at Elliot Lake was (by Orders-in-Council 2681/76 and 2992/76) subject to a hearing similar to that required under the Environmental Assessment Act although it was not under the Act. (50)

As was discussed previously, under the Pits and Quarries Control Act in townships designated under the Act, hearings may be held before the Ontario Municipal Board to consider an application for a licence. Parties with a direct interest in the outcome of the hearing and other interested parties can present evidence opposing or supporting an application.

In British Columbia, the Mining Regulations Act includes a provision requiring the public to comment on a company's rehabilitation plans, although the comments are made through written submissions and not a hearing. This is, in our view, inadequate, because it does not permit scrutiny of a company's development and operating plans in a public forum.

## 2. Precedents for Public Participation in the Forestry Industry

The principle of requiring public hearings for resource development projects is also accepted and used in the regulation and operation of the forestry industry. In Ontario, Forest Management Agreements are subject to the Environmental Assessment Act, although they are under an interim exemption.

The British Columbia Forest Act requires the Minister or his designate to convene a public hearing in which any person may make a submission on an application for a tree farm licence. <sup>(51)</sup> The evaluation of an application must consider its employment potential, development <sup>(52)</sup> and environmental objectives and its contribution to Crown revenues.

<sup>(53)</sup> The Cabinet must approve the application, and the chief forester must approve the management and working plan before a tree-farm

(54)

licence can be issued. A similar procedure is used in British Columbia with respect to pulpwood agreements.

## VI. CONCLUSION

A revised Mining Act should contain provisions for recognizing the goals of environmental protection through planned and orderly development. The orderly development of mines can best be achieved through a procedure which recognizes sound planning principles. Planning should be done at a regional level to determine which lands are suitable for mining activity and which are better suited for other land uses. Through regional planning, interested parties will have input into which lands are best suited for mining activities and which are best suited for other activities, thereby giving consideration to the protection of valuable land, water, vegetation and wildlife resources. An area identified as having no mineral potential could therefore be planned for other land uses without interference from mining activity in the future. The regional plans should be developed by MNR with participation by the public. Once completed, the plans should be submitted for public review to a Hearing Board.

Planning should also be done on a site specific level by mining companies to ensure that operational methods will be environmentally sound and that appropriate rehabilitation techniques will be enacted by the company once the mining operations cease. Applications for licences required for the purpose of developing mineral resources should be accompanied by site plans, operation plans and rehabilitation plans. In addition, an assessment of environmental impacts and proposals for minimizing environmental impacts should also be submitted for review at a public hearing. Permission to proceed with the deve-

lopment of a mine would be granted once the Hearing board and the Minister were satisfied with the company's plans and methods of operation.

All interested parties should be able to participate in the approval of the site plans. Through this process, they can attempt to protect themselves, their property and their environment by making representation and presenting evidence relating to appropriate environmental safeguards.

The Ministry of Natural Resources has at their disposal several ways for providing public review of regional and site specific plans. One method would be to create a Mining Development Review Board through amendments to the Mining Act. Another method would be to submit the plans to an Environmental Assessment Board hearing under the Environmental Assessment Act. We recommend the latter approach.

One attractive feature of the Environmental Assessment Act is that it is already in place with a well-developed procedure for proponents and other interested parties to follow. Using the Environmental Assessment Act would obviate the need to form another hearing tribunal which would, in essence, duplicate the role of the Environmental Assessment Board.

Under the EAA, environment is defined in the broadest possible terms. (55) The EAA is designed to ensure that development decisions consider all possible impacts; consequently the developer must submit an environmental assessment consisting of:

- a description of the undertaking;
- a rationale for the undertaking;
- alternate methods of carrying out the undertaking;
- alternatives to the undertaking;
- a description of the environment and how it may be affected;
- and
- actions that may be taken to mitigate adverse impacts on  
(56)  
the environment.

Once an assessment is submitted, a government review of the document is undertaken to determine whether it is adequate. The review document is available to the public. A hearing can be requested by the public and the Environmental Assessment Board will hold a hearing. If a hearing is not requested, the Minister decides whether the EA is satisfactory, and then the Cabinet must decide whether to approve  
(57)  
the undertaking, or refuse to approve it.

If this route is selected, private sector mining projects will have to be included under the EAA. At present, despite the often severe environmental effects, private sector mining projects are excluded from the Environmental Assessment Act, even though they may occur on Crown lands or on Crown owned mineral resources. The act of disposing of Crown resources for activities such as private sector mining projects, which are not subject to the Act, is exempted from the Environmental Assessment Act by Ontario Regulation 809/  
(58)  
80. These two factors combine to exclude mining activity on Crown land from public scrutiny.

The Ministry of Natural Resources has stated that on an indeterminate date in the future, the Environmental Assessment Act will apply to private mining projects. (59)

This commitment to the people of Ontario should be kept, and private sector projects including mining activities, should be put under the Environmental Assessment Act.

Mining contributes significantly to Ontario's economic prosperity, however it also contributes significantly to Ontario's environmental and land use problems. The introduction of planning principles into a revised Mining Act would enable the proponents to plan mining projects in a manner consistent with the goal of protecting the quality of our environment and our environmentally fragile wilderness areas.

If the principles of planning are accepted in a revised Mining Act it is essential that meaningful public participation also be included. For it is through meaningful public participation that the public can contribute to the planning process by expressing their concerns about a planned mining development and by introducing information on methods that would minimize their concerns.

The Canadian Environmental Law Association therefore urges the Minister of Natural Resources to include the principles of environmental protection, planning and public participation in a revised Mining Act.

VII. NOTES

1. Willms, John., Vanderwagen, Joel., Beak, Lynn. The Legal and Administrative Basis of Land Use and Environmental Decision-Making North of Latitude 50° - a Guidebook and Selected Observations, Royal Commission on the Northern Environment, March 1980, pp.199-202.
2. Ripley, Earl A., Redmann, Robert E., with Maxwell, James. Environmental Impact of Mining in Canada. Centre for Resource Studies, Kingston, Ontario, 1978, p.23.
3. Ibid., p.31.
4. Estrin, David and Swaigen, John, with Carswell, Mary Anne, (ed.). Environmental on Trial: A Handbook of Ontario Environmental Law, Toronto, The Canadian Environmental Law Research Foundation, 1978, p.162.
5. Environmental Impact of Mining in Canada, op.cit., p.44.
6. Environment on Trial, op.cit., p.163.
7. Ministry of Natural Resources, Proposed Revision of the Mining Act, R.S.O. 1980, Chapter 268 (Excepting Part IX): Discussion Paper, p.1.
8. The Legal and Administration Basis of Land Use and Environmental Decision-Making North of Latitude 50°, op.cit., p.76.
9. Ibid., p.81.
10. Ibid., p.76.
11. Ibid., p.85.
12. The Mining Act, R.S.O. 1980, Chapter 268, s.61(5), s.92(1), s.131(1)(2), s.133, s.134, s.135, s.136, s.137, s.138, s.139, s.140.
13. The Mining Association of Canada, Mining in Canada: Facts and Figures, 1982, p.15.
14. The Coal Conservation Act, R.S.A. 1980, Chapter C.14, s.4.
15. The Mining Regulations Act, R.S.B.C. 1979, Chapter 265, s.10(1).
16. Ibid., s.10(1).
17. Ibid., s.19(9).
18. Ibid., s.10(9), s.24.
19. The Legal and Administrative Basis of Land Use and Environmental Decision-Making North of Latitude 50°, op.cit., p.82.



20. Ibid., p.91.
21. Ibid., p.92.
22. Ibid., p.76.
23. Environment on Trial, op.cit., p.165.
24. Ibid., pp.156-157.
25. Ibid., pp.156-157.
26. Legal and Administrative Basis for Land Use and Environmental Decision-Making North of Latitude 50°, op.cit., p.145.
27. Ibid., p.145.
28. Ibid., p.145.
29. Pits and Quarries Control Act, R.S.O. 1980, Chapter 378, s.4(2).
30. Ibid., s.7(1)(2).
31. Pits and Quarries Control Act, op.cit., s.6.
32. Ibid., s.8(1)(2)(3).
33. Ibid., 2.9(1)(2)(3).
34. Swaigen, John and Castrilli, J.F., The Proposed Aggregates Act: Discussion, Evaluation and Recommendations, Kingston, Centre for Resource Studies, 1979, p.18.
35. Ibid., p.17.
36. Ibid., p.12.
37. Mining Regulations Act, R.S.B.C. op.cit., s.10(2)(3).
38. Ibid., s.10(4).
39. Ibid. s.10(5).
40. Land Surface Compensation Act, R.S.A. 1980, Chapter L-3, s.8, s.10,
41. Crown Timber Act, R.S.O. 1980, Chapter 109, s.26, s.28, s.29, s.30.
42. Ibid., s.27.
43. Forest Act, R.S.B.C., 1979, Chapter 140, s.27(7), (23).
44. Ibid., s.28.

45. Ibid., s.28.
46. Ibid., s.27(4), s.34(3),(5).
47. Legal and Administrative Basis of Land Use and Environmental Decision-Making North of Latitude 50°, op.cit., p.155.
48. Ministry of Natural Resources, Guide to Legislation Affecting Mining in Ontario, Mineral Policy Background Paper, No.9, May 1979, p.31.
49. Environmental Update, Volume 3, No. 3, June, 1978, Appendix I, "The Guidelines for the Onakawana Development".
50. Orders-in-Council 2681/76 and 2992/76, see Appendix in Environmental Assessment Board, The Expansion of the Uranium Mines in the Elliot Lake Area, final Report, May 1979.
51. Forest Act R.S.B.C., op.cit., s.27(4).
52. Ibid., s.27(5).
53. Ibid., s.27(6).
54. Ibid., s.27(7).
55. Environmental Assessment Act, R.S.O. 1980, Chapter 140, s.1(c).
56. Ibid., s.5(3).
57. Ibid., s.14.
58. Ontario Regulation 809/80, Order Made Under the Environmental Assessment Act, 1975, Exemption MNR-26, The Ontario Gazette Vol.113-42, Saturday, October 18, 1980.
59. Guide to Legislation Affecting Mining in Ontario, op.cit., p.31.