

OALA

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December 27th, 1979.

Industrial Minerals Section
Ministry of Natural Resources
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RECEIVED

MINERAL RESOURCES BRANCH
INDUSTRIAL MINERALS SECTION

Subject: Bill 127 - An Act to revise the Pits and Quarries
Control Act

Gentlemen:

In response to your letter of June 29, 1979, the Ontario Association of Landscape Architects has reviewed Bill 127, and has the following comments:-

In some ways Bill 127 represents a significant improvement in potential control of the pit and quarry industry as compared with the present legislation. The government is to be commended on this action. However, it is difficult to fully assess the full value of this legislation without knowledge of the regulations which are anticipated to be "issues under section" 62 of the act.. Many of the matters related to pit and quarry operation, site management and rehabilitation, which are of great concern to our profession, are currently covered by regulation and ad hoc policy rather than specifically set out in the present act itself.

The new act treats such matters similarly. Although Part VI of the act, REHABILITATION, is relatively extensive, Sections 46 through 54, it is devoted exclusively to administrative and accounting matters. It does not contain a single word or statement pertaining to biophysical or natural resource matters! By comparison, matters related to licencing procedure, land-use problems, O.M.B. hearings, administration of the act, security deposits and the detailed information on site conditions other than rehabilitation are treated in extensive and explicit detail.

The definition of rehabilitation given in Section 1, subsection (w) is related primarily to land-use and does not include any provision for quantification or determination of an acceptable minimum level of performance. Except through the reference to land-use, "former use or condition" it has no biophysical characteristics or management objectives incorporated within the definition.

If rehabilitation is to be treated with the seriousness of purpose suggested by Section 2, subsection (c), then the matter must be much more fully treated. The history of proper rehabilitation in Ontario has been acknowledged by the government and by some industry representatives to be far from

acceptable. As many rehabilitation programs will require twenty years or more to complete and proper initial planning, the new act must address the distant future and not just today and tomorrow.

Other jurisdictions have found extensive and detailed descriptions of rehabilitation which are suitable for their legislative purposes. The task is difficult but not insurmountable. As examples, we enclose copies of selected portions of

"The Surface-Mined Land, Conservation and Reclamation Act - As Amended" The State of Illinois and selected portions of the Rules and Regulations issued under this act. I realize that some of this material is properly the matter for regulations and not the body of an act. This material does, however, demonstrate the feasibility of describing rehabilitation, biophysical characteristics of rehabilitation, and methods of assessing acceptable rehabilitation performance in legislation. The attitude and concern for rehabilitation reflected in these examples is extremely difficult to find in Ontario, in existing and in proposed legislation, as well as on the ground.

Enclosures from Illinois Act - amended through August 11, 1978

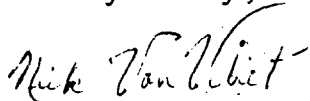
- Section 2 - Statement of Policy - a broad policy statement touching on practically all the biophysical aspects of rehabilitation which are of concern to landscape architects, biologists, soil scientists, planners, etc., etc.
- Section 3 - accompanies Section 2
- Section 5g- approval of rehabilitation plan
- Section 6j- detail of rehabilitation for agriculture.

Enclosures from Rules and Regulations (effective March 16, 1978

- Rule 502 - Reclamation purposes set out
- Rule 701 - Reclamation plan approval
- Chapter XI - "General Reclamation Requirements"
- Chapter XII- "Criteria for Types of Land Reclamation"
- Chapter XVI- "Affected Acreage Map" (requirement for a yearly map report on disturbed area).

In conclusion, we consider the Act, as it stands, most inadequate with respect to the treatment of rehabilitation.

Yours very truly,



Nick Van Vliet,
President OALA

NVV/hh

Encl. - Surface-Mined Land Conservation and Reclamation Act (as amended)
- Rules and Regulations (State of Illinois)

State of Illinois
DEPARTMENT OF MINES & MINERALS

SURFACE-MINED LAND CONSERVATION & RECLAMATION ACT

RULES AND REGULATIONS

(Effective March 18, 1976)

Applies to Aggregate

Rule 502 --- Reclamation Plan and Map

Each application for a permit, and each amendment to an application for a permit, submitted to the Department under the Act and these Rules and Regulations shall contain a conservation and reclamation plan for each geographically distinct mining site or refuse disposal site to be affected during the permit period. Included with the plan shall be maps of the area to be affected (with the same scale as recommended in Rule 1604 of these Rules and Regulations) designating which parts of the lands shown are to be reclaimed for:

- (a) forest
- (b) pasture
- (c) crop
- (d) horticultural
- (e) homesite
- (f) recreational
- (g) industrial, or
- (h) other uses, including food, shelter and ground cover for wildlife

The reclamation plan, together with the reclamation maps shall: provide for timely compliance with all operator duties as set forth in Section 6 of the Act and these Rules and Regulations by feasible and available means; and, provide for storage of all overburden and refuse.

copy

Rule 701 --- Approval of Plans

The Department shall approve a conservation and reclamation plan if, and only if, the plan complies with the Act and these Rules and Regulations, and if the completion of the plan will in fact accomplish every duty required of the operator. The Department's approval of a plan shall be based on the advice of technically trained foresters, agronomists, economists, engineers, planners and other relevant experts having experience in reclaiming surface-mined lands. The Department shall consider the views filed by the county board in writing with the Department. The Department shall consider the short and long term impact of the proposed mining on:

- (a) vegetation
- (b) wildlife
- (c) fish
- (d) land use
- (e) land values
- (f) local tax base
- (g) economy of the region and of the State
- (h) employment opportunities
- (i) air pollution
- (j) water pollution
- (k) soil contamination
- (l) noise pollution
- (m) drainage

CHAPTER XI

Copy entire chapter

GENERAL RECLAMATION REQUIREMENTS

Rule 1101 --- Time Requirement for Completion of Reclamation

(a) Generally

All grading requirements provided for in the Act and these Rules and Regulations shall be carried to completion by the operator prior to the expiration of eleven months after June 30th of the fiscal year in which the mining occurred. All other reclamation provided for in the Act and these Rules and Regulations, except gob and slurry areas in active use, shall be carried to completion by the operator prior to the expiration of three years after June 30th of the fiscal year in which the mining occurred. Gob and slurry disposal areas shall be reclaimed as provided in Section 6 of the Act and these Rules and Regulations within one year after cessation of active use.

(b) Exceptions

When extension of the reclamation period is necessary to allow continued mining operation otherwise permitted by the Act and these Rules and Regulations, or to accomplish acceptable reclamation, such request for extension shall be justified in writing to the Department. It shall be within the discretion of the Department to grant such extension consistent with the Act and these Rules and Regulations. If lands are not satisfactorily reclaimed and if the Department shall deny request for an extension of the reclamation period, the Department shall declare forfeiture of the surety bond or security on such land not satisfactorily reclaimed or, in the alternative, the Director shall provide that the operator cover such areas within one year with material capable of being vegetated in accordance with vegetative standards adopted by the Department.

Rule 1102 --- Grading Requirements

(a) 15% Requirement

All land affected by surface mining, except as otherwise provided for in the Act and these Rules and Regulations, shall be graded to a rolling topography traversible by machines necessary for maintenance in accordance with planned use. Such slopes shall have no more than a 15% grade.

(b) 30% Exception

Slopes may exceed a 15% grade in the case of those lands to be reclaimed in accordance with the filed plan for forest plantation, enhancement of wildlife or establishment of recreational sites and side slopes of haulage road inclines to be used for the formation of lakes, but shall not exceed a 30% grade in such cases. The slope of the final cut spoil, the outside slope of the boxcut spoil and the outside slopes of all overburden deposition areas shall likewise not exceed a 30% grade.

(c) Original Grade Exception

The slope of affected lands need not be reduced to less than the slope of the original grade of the overburden of that area prior to mining.

(d) Terrace Requirement

Where acceptable soil conservation practices made it advisable to do so, the Department shall require operators, consistent with Chapter 13 of these Rules and Regulations, to terrace reclaimed lands for the prevention of excessive erosion.

(e) Highwalls, except those created by the aggregate mining industry, shall be reshaped to a maximum slope of two-to-one or 50% to the anticipated water level or dry pit bottom unless otherwise excepted by the Director. The Director shall submit proposed exceptions to the Advisory Council for its comments before granting any exceptions under the Act or these Rules and Regulations.

Rule 1103 --- Land Not Requiring Reclamation

In cases where pools or lakes capable of supporting aquatic life may be formed by rainfall or drainage runoff from adjoining land, the depressed haulage roads or final cuts or any other area to be occupied by pools or lakes, if approved by the Department, shall not require any further reclamation. Where the Director determines that a road, dry pit bottom or ditch is consistent with and necessary to the conservation and reclamation plan for an area, no further reclamation shall be required.

Rule 1104 --- Land To Be Reclaimed For Row Crop Agriculture

When the Director determines that the land to be affected is (1) capable of being reclaimed for row-crop agricultural purposes and suitable for row-crop agricultural purposes based on United States Soil Conservation Service soil survey classifications of the affected land prior to mining, and (2) when the Director determines that the optimum future use of the land affected is for row-crop agricultural purposes, the affected land shall be graded to the approximate original grade of the land and all or part of the darkened surface soil, as defined in this Act, shall be segregated during the stripping process and replaced as a final cover as a last step in the required grading. When available in such depth, at least 18 inches of the darkened surface soil shall be segregated and replaced. When less than 18 inches of darkened surface soil exists all such lesser amounts shall be segregated and replaced. In no case shall less than the top 8 inches of surface soil, darkened or not, be segregated and replaced. This segregation and replacement requirement may be altered by the Department only if it is determined upon the advice of competent soil scientists that other material available in the cast overburden would be suitable in meeting the reclamation requirements. Below the darkened surface soil the replaced material shall be suitable as an agricultural root medium. The Department shall determine by rules and regulations what constitutes a suitable agricultural root medium by composition and depth. On all lands to be reclaimed the operator shall not be required to create a soil condition better than that which existed prior to surface mining.

Slope classifications of lands before mining are (a) 0 to 2%; (b) 2 to 5%; (c) 5 to 10%.

Approximate original grade means the grading of affected lands which were originally of the (a) and (b) slope classifications to a maximum slope not to exceed 5% slope with a planned erosion control system approved by the Director for 3 to 5% slopes.

Approximate original grade means the grading of affected lands which were originally of the (c) .5 to 10% slope to a maximum slope not to exceed 10% and shall have a planned erosion control system approved by the Director.

Planned terrace systems, when utilized as part of a planned erosion control system, shall be constructed according to U.S. Department of Agriculture Soil Conservation Service specifications.

Slopes on all affected lands shall be measured from the drainage divide to the base of the slope or to the intermittent water course as the lowest point. Abrupt slope changes between these points are not acceptable except for unusual conditions such as ditches, terraces, and roads.

The length of slope and contour of the restored surface shall be conducive to those farming operations normally associated with row crop production. Farming operations as used here shall include such measures or practices necessary to provide adequate drainage and erosion control for sustained row crop production.

The materials under the darkened surface soil suitable as a root medium shall contain no more than 20% coarse material greater than 2mm in size by volume. No more than half of the coarse material may be between 3 inches and 10 inches in the greatest dimension. No fragments shall be greater in size than 10 inches in the greatest dimension. In no case may clay material of less than 2 microns be greater than 40% by weight.

These texture requirements do not apply if the soil conditions of the affected land prior to mining did not meet the standards included herein (i.e., if more than 20% coarse material by volume existed in the root medium below the darkened surface soil prior to mining, the same percentage of coarse material in the root medium will be allowed after mining; if more than one-half of the coarse material consisted of rocks in the 3 to 10 inch size category prior to mining, that same percentage will be permitted after mining; and if more than 40% by weight of clay materials less than 2 microns in size existed in the root medium below the darkened surface soil prior to mining, a like percentage by weight will be allowed after mining in the material under the darkened surface soil.)

In addition to meeting texture requirements, the materials under the darkened surface soil, must be chemically suitable as an agricultural root medium. Materials suitable as an agricultural root medium shall be of a vertical thickness adequate

including the darkened surface soil, to ensure a total depth of four feet. Pyritic material capable of producing toxic acidic conditions shall not be incorporated within the surface four foot layer of finally graded lands.

The Director may alter the slope and texture requirements under this Rule only upon a clear and convincing showing that to vary such requirements would better effectuate the purposes of this Act than would enforcing the standards herein.

Location of texture compliance samples will be determined by random methods similar to those described in Rule 1202 (b) (1) of the Rules and Regulations and texture analysis shall be determined by methods as subscribed by the Department.

The final cut and submerged roadways may remain if the Department determines that such final cut or roadway could form a water impoundment capable of supporting desirable uses such as water for livestock or wildlife; and if to be used for fish life, shall have minimum depths in accordance with standards for fish stocking as recommended by the Department. All impoundments and structures must be included in the reclamation plan for approval or disapproval by the Department. The boxcut spoil shall be graded in accordance with Section 6 of the Act, and with these Rules and Regulations.

Rule 1105 --- Water Impoundments.

All runoff water shall be impounded, drained, or treated so as to reduce soil erosion, damage to unmined lands and the pollution of streams and other waters. The operator shall construct in accordance with Chapter 15 of these Rules and Regulations earth dams, where lakes may be formed, in accordance with sound engineering practices if necessary to impound waters, provided the formation of the lakes or ponds will not interfere with underground or other mining operations; other subsequent uses of the area approved by the Department, or damage adjoining property. Such water impoundments shall be approved by the Department based on the expected ability of the lakes or ponds to support desirable aquatic life and shall have minimum depths in accordance with standards for fish stocking in the various areas of the State recommended by the Department.

Rule 1106 --- Covering Toxic Materials

Acid forming materials present in the exposed face of the mined mineral seam or seams shall be covered with not less than 4 feet of water or other materials, which shall be placed with slopes having no more than 30 percent grade, capable of supporting plant and animal life. Final cuts or other depressed affected areas, no longer in use in mining operations, which accumulate toxic waters will not meet reclamation requirements.

Rule 1107 --- Vegetative Cover Essential

Unless the approved reclamation plan is inconsistent with vegetative cover, the soil shall be prepared and planted with trees, shrubs, grasses and legumes to provide suitable vegetative cover, in accordance with standards adopted by the Department and as set forth in Chapter 12 of these Rules and Regulations.

Rule 1108 --- Minimum Distance of Excavation to Public Right-of-Ways and Adjacent Property Owners

Surface mining operators that remove and do not replace the lateral support within a three-month period shall not, unless mutually agreed upon, by the operator and the adjacent property owner approach property lines, established right-of-way lines of any public roads, streets or highways closer than a distance equal to 10 feet plus $1\frac{1}{2}$ times the depth of the excavation except where consolidated materials or materials of sufficient hardness or ability to resist weathering and to inhibit erosion or sloughing

exists in the highwall, the distance from the property line or any established right-of-way line shall not, unless mutually agreed, be closer than a distance equal to 10 feet plus $1\frac{1}{2}$ times the depth from the natural ground surface to the top of the consolidated material or materials. When the operator desires to remove the lateral support and replace it within a three-month period, the operator shall submit to the Department a written request for said purpose, outlining how the lateral support shall be replaced within three months. Said request shall be approved or denied by the Department in a timely manner.

Rule 1109 --- Planting Stock Unavailable

If the operator is unable to acquire sufficient planting stock of desired tree species from state nurseries or acquire such tree species elsewhere at comparable prices, the Department shall grant the operator an extension of time until planting stock is available to plant such land as originally planned, or shall permit the operator to select an alternate method of reclamation in keeping with the provisions of the Act and with these Rules and Regulations.

Rule 1110 --- Removal of Abandoned Haulage Roads and Mine Drainage Ditches

All abandoned haulage roads and all mine drainage ditches shall be removed and graded, except where the Director determines that a road or ditch is consistent with and necessary to the conservation and reclamation plan.

Rule 1111 --- Sanitary Land Fill Requirements

The reclamation requirements under Section 6 of the Act and these Rules and Regulations do not apply to affected land use for sanitary land fill if such sanitary land fill is approved by the Environmental Protection Agency. The Environmental Protection Agency may regulate the amount of land to be used for that purpose and may establish a time schedule for the orderly and timely completion of such sanitary land fill. Any affected land designated for sanitary land fill and not used for such purpose within five years is subject to the reclamation provisions of Section 6 of the Act and these Rules and Regulations. Lands used for sanitary land fill, which are under bond to the Department, shall continue under bond as long as the land is used for sanitary land fill and until the land is approved and released by the Department.

CHAPTER XII

CRITERIA FOR TYPES OF LAND RECLAMATION

Rule 1201 --- Reforestation

(a) Minimum Stocking Standard

Five hundred (500) living trees per acre will be the minimum standard for acceptable stocking after one growing season. In this text the term trees will include acceptable shrubs. Survival counts may be made after the second growing season if requested by the operator. In such a case, four hundred fifty (450) living trees per acre will be the minimum standard for acceptable stocking after the second growing season.

(b) Sampling Procedure to Determine Stocking

Determine the average spacing between planted rows and between trees within rows. From this calculate the number of planting spots per acre (and for the area to be examined) as shown below:

43,560

= planting spots/acre

Spacing between rows (feet)

X

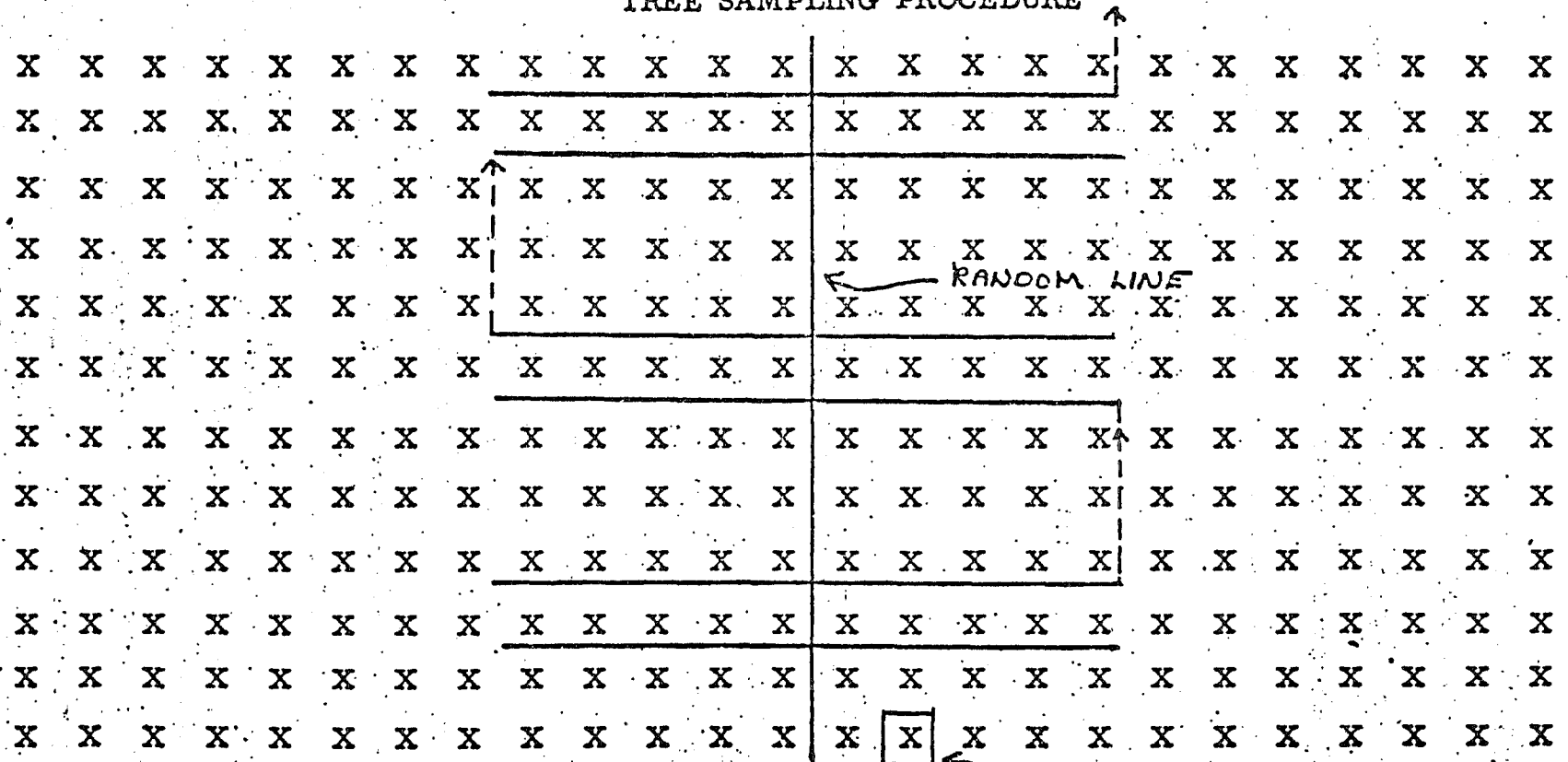
Spacing between trees in row (feet)

Determine the number of planting spots that must be examined to constitute a 10 percent sample.

Plot four randomly selected lines across the area, perpendicular to the planted tree rows. All planted species will be taken into consideration. Based on the number of rows across a given area, determine the number of rows that must be examined for the 10 percent sample, assuming that 10 or 20 planting spots will be examined along each row.

Locate a series of transects perpendicular to, and balanced along the random lines as shown in the diagram below. The transect's width will extend on either side of a planted row halfway to the adjacent rows. Each planting spot on the transect will be examined and if a living tree, either planted or an acceptable volunteer, occurs then that spot will be tallied as "living" on a tally meter. If no such living trees occur, tally the spot as "dead" on another tally meter. A planting spot will be considered as a rectangle defined by the transect boundaries and extending

TREE SAMPLING PROCEDURE



X X X X X TRANSECT

----- PATH OF EXAMINER

PLANTING SPOT

along a row from a given planted tree halfway to adjacent planted trees. After transect tallies have been completed calculate the Percent Survival as follows:

Number of Planting Spots With Live Trees
of Acceptable Species

= Percent Survival

Number of Planting Spots With Live Trees
of Acceptable Species PLUS Number of
Planting Spots With Dead Trees or No
Trees or Unacceptable Species

Volunteer species that are acceptable or unacceptable will vary for different parts of the State, with compatibility of species, and with soil and site conditions. Acceptability will be based on decisions made by the reclamation technician engaged in an examination of a given site.

The number of acceptable live trees per acre can be calculated by multiplying the percent survival times the number of planting spots per acre.

Both temporary and permanent water and roads will be omitted from the sampling area.

Openings, or failed spots, larger than one quarter acre will be identified on the plan map by the examiner and will not be approved until replanted and the minimum stocking standard attained.

Rule 1202 --- Pasture or Crop

Rates of seeding per acre and cultural methods shall be governed primarily by those suggested in Bulletin 628, "Reclaiming Illinois Strip Coal Land With Legumes and Grasses", University of Illinois Agricultural Experiment Station, or by other research or successful experience with pasture or meadow seedings on Illinois or similar mined lands.

Top quality seed shall be used and it is suggested that seed be used bearing the official state tag giving the purity and germination. Legume seed shall be properly inoculated. Seeding methods, fertilization, weed, insect and disease control shall be in accordance with established methods.

(a) Minimum establishment standards

A 65% stand of seeded legumes and/or perennial grass shall be required in August through October of the seeding year or an 85%

stand shall similarly be required the year following seeding. If an 85% stand is not achieved the year following seeding, the area shall be reworked and reseeded. If approved by the Director in advance, planting to grain or other crops on suitable land shall meet the requirements.

(b) Stand sampling procedure

Percent stand shall be determined as follows:

- (1) Twenty points shall be selected in the seeded area. The approximate points shall be determined on an aerial photograph by placing a grid over the area on the photograph so that 100 or more intersections fall in the seeded area. Twenty of the intersections shall be selected using appropriate tables of random numbers. These points in the field shall be located within 100 feet from the photograph. The exact point shall be decided by throwing some object without looking. Bare areas will not be avoided.
- (2) A twenty foot engineer's measuring tape shall be extended directly south of a selected point.
- (3) Whether or not seeded grasses and legumes occur in each .2 foot² segments along the tape shall be recorded. If a plant or any part of a plant occurs in a segment that segment shall be considered to have vegetative cover.
- (4) Percent vegetative cover shall be the number of .2 foot² segments along the 20 foot tape that have seeded vegetation.

Rule 1203 --- Recreational Developments

Each area, regardless the primary land use to be emphasized, should be individually appraised taking into account all factors to ensure potential recreational development and use. It is understood that in those cases where primary use is to be recreation, developments will include only requirements necessary to establish the completed base for a fully operational recreation area. However, all proposals for recreational development shall clearly delineate the potential for a functional operation and plan of maintenance.

Areas may be highly variable in size depending on the type and combination of different activities considered possible, as well as the projected population of users.

(a) Grading of Displaced Overburden

- (1) One acre out of ten is to be graded so as to be reasonably level and adequately drained. Such graded areas should be distributed in keeping with planned use.
- (2) All areas for recreation shall reflect minimal grading requirements (maximum of 30% slope) as specified in Section 6A of the Act.

(b) Access

- (1) Maintainable roads shall be established to provide access to lakes and parking sites associated with areas planned for possible future development under the basic recreational plan.
- (2) Actual location of such roads are to make accessible all portions of the area within a distance not to exceed 1/2 mile and planned so as to connect such roads with all graded acreages. (Refer to a-1 of this Rule.)

(c) Revegetation

- (1) A minimum of 30 percent of the total land area shall be planted to trees or shrubs which will maximize wildlife populations and/ or contribute to the scenery of the area. These must meet the stand requirements established for reforestation.
- (2) All other land not planted to trees and shrubs shall be seeded to grasses and/or legumes of greatest value to wildlife and which reflect those species considered adaptable to the region as well as which might be most appropriate for the planned recreational use. Stand requirements must be equivalent to those established for pasture.

(d) Miscellaneous

- (1) A recreational plan should emphasize use of the existing water. For areas where recreation is to be the primary use, unless endowed with other exceptional attributes, these should contain not less than 5 percent of its total area with acceptable water, (at least 8 feet deep and 3 acres in size; 7 to 10 percent is preferable). These waters must be stocked with fish in accordance with recommendations by the Division of Fisheries, Illinois Department of Conservation.

- (2) Bodies of water, irrespective of size and depth, are desirable for various wildlife and hence should be provided, wherever feasible, with plans for development and management.
- (3) All aspects of game propagation and management shall be in accordance with recommendations by the Division of Wildlife Resources, Illinois Department of Conservation.
- (4) Exceptions to regulations should allow for interesting and challenging deviations from the more traditional plans for recreation development so as to permit development of certain scenic or landscaping opportunities, planned sites of isolation, or interesting and unusual hiking and riding trails. Further, exceptions are in order so as to encourage best integration of recreational developments as a part of the total land use concept such as when an area rejects agricultural or forestry as the dominant use. Such exceptions, however, shall not violate the requirements established by the Act with reference to grading and revegetation.
- (5) Recreational development for water filled quarries, sand excavation, etc. shall include adjacent lands sufficient to permit sites for parking and access. Landscaping shall be so planned as to provide publicly acceptable environments. Where deemed feasible by the Divisions of Fisheries and Wildlife Resources, Illinois Department of Conservation, fish stocking and game propagation and management shall be included in the plan for development and maintenance.

CHAPTER XVI

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AFFECTED ACREAGE MAP

Rule 1601 --- When to File

On or before September 1 of each year, every permit holder shall submit to the Department and to the county clerk, MLCR Form 3, "Detail Map of Affected Land". This map shall be of the land from which the overburden has been removed, together with the unmined land upon which the overburden is deposited, and haulage roads and drainage ditches.

Rule 1602 --- Execution

The forms shall be duly executed and duplicate maps shall be attached showing the land affected during the fiscal year just ended. The Department may require the map to be executed by an engineer registered in the State of Illinois.

Rule 1603 --- Form

The map shall be planned as a continuous map, as far as possible, so that the land affected each year may be added and

indicated on the map by the dates it was affected. All maps are to be blue or black line prints or scaled aerial photographs.

Rule 1604 --- Scale

The scale of the map shall be reasonable to the area of land affected so as to show necessary detail and so that the area affected may be included within a map, width not to exceed 42 inches.

SUGGESTED SCALES: (Up to 10 acres - 1" = 100'
(Up to 40 acres - 1" = 200'
(40 acres & above - 1" = 400'

Rule 1605 --- Detail

All maps shall show sections, township, range and county lines coming within the scope of the map access to the area from the nearest public road and all weather roads within the mined area; a title containing name of operator, address, scale of map, by whom map was drawn, name of surveyor or engineer.

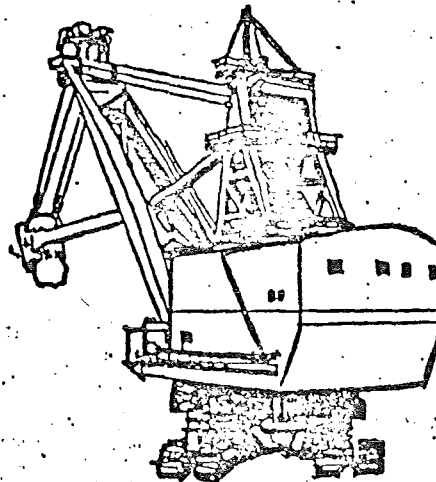
Rule 1606 --- Amendment to Permit Required

If the area of affected land is in excess of the estimated acreage in the original permit and any amendments thereto, an application for an amendment to the permit necessary to include such additional acreage shall be made consistent with the Act and these Rules and Regulations, including, but not limited to, Chapter IX of these Rules and Regulations.

SURFACE-MINED LAND

CONSERVATION AND

RECLAMATION ACT - AS AMENDED



Includes All Amendments
Through August 11, 1978

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Section 2. Statement of Policy. It is declared to be the policy of this State to provide for conservation and reclamation of lands affected by surface mining in order to restore them to optimum future productive use and to provide for their return to productive use including but not limited to: the planting of forests; the seeding of grasses and legumes for grazing purposes; the planting of crops for harvest; the enhancement of wildlife and aquatic resources; the establishment of recreational, residential and industrial sites; and for the conservation, development, management, and appropriate use of all the natural resources of such areas for compatible multiple purposes, to aid in maintaining or improving the tax base; and protecting the health, safety and general welfare of the people, the natural beauty and aesthetic values, and enhancement of the environment in the affected areas of the State; to prevent erosion, stream pollution, water, air and land pollution and other injurious effects to persons, property, wildlife and natural resources; and to assure that conservation and reclamation plans for all surface mining activity are available for the prior consideration of county governments within whose jurisdiction such lands will be affected by surface mining and to permit participation and authorize cooperation and coordination with the federal government in initial regulatory programs under the federal Surface Mining Control and Reclamation Act of 1977, Public Law 95-87, Title 30, USC Sec. 1201 et seq.

Section 3. Definitions. Wherever used or referred to in this Act, unless a different meaning clearly appears from the context:

(a) "Reclamation" means conditioning areas affected by surface mining to achieve the purposes of this Act.

(b) "Overburden" means all of the earth and other materials which lie above natural deposits of coal, clay, stone, sand, gravel, or other minerals, and also means such earth and other materials disturbed from their natural state in the process of surface mining.

(c) "Surface mining" means the mining of any minerals by removing the overburden lying above natural deposits thereof, and mining directly from the natural deposits thereby exposed or the deposition of overburden therefrom.

(d) "Operator" means any person, firm, partnership or corporation engaged in and controlling a surface mining operation, and includes political subdivisions and instrumentalities of the State of Illinois.

(e) "Pit" means a tract of land, from which overburden has been or is being removed for the purpose of surface mining.

(f) "Final cut" means the last pit created in a surface-mined area.

(g) "High wall" means that side of the pit adjacent to unmined land.

(h) "Affected land" means the area of land from which overburden is removed for surface mining or upon which overburden or refuse is deposited. It also means any area of land utilized for drainage ditches, haulage roads, slurry pond impoundments and gob disposal areas which are constructed, created, extended, enlarged or expanded.

(i) "Refuse" means all waste materials directly connected with the cleaning and preparation of minerals mined by surface mining and discarded equipment and machinery.

(j) "Slurry" means that portion of refuse separated from the mineral in the cleaning process, consisting of fines and clays in the preparation plant effluent, and which is readily pumpable.

(k) "Gob" means that portion of refuse consisting of waste coal, rock, pyrites, slate, or other unmerchantable material of relatively large size which is separated from the mineral in the cleaning process.

(l) "Acid forming materials" means those materials capable of producing toxic conditions when exposed.

(m) "Toxic conditions" means any conditions that will not support higher forms of plant or animal life in any place in connection with or as a result of the completion of surface mining.

(n) "Ridge" means a lengthened elevation of overburden created in the surface mining process.

(o) "Peak" means a projecting point of overburden created in the surface mining process.

(p) "Department" means Department of Mines and Minerals, or such department, bureau, or commission as may lawfully succeed to the powers and duties of such Department.

(q) "Director" means the Director of the Department of Mines and Minerals or such officer, bureau or commission as may lawfully succeed to the powers and duties of such Director.

(r) "Darkened surface soil" means mineral horizons formed at or adjacent to the surface of the soil which are higher in organic matter content and visibly darker in color than the immediately underlying horizons.

(s) "Aggregate mining industry" means producers, by surface mining method, of all minerals other than coal, including sand, gravel, silica sand, shale, clay, limestone and any other mineral which may be so mined.

Section 4. Necessity of permit. It shall be unlawful for any operator to engage in surface mining in an area where the overburden shall exceed 10 feet in depth or where the operation will affect more than 10 acres during the permit year without first obtaining from the Department a permit so to do, in such form as is hereinafter provided.

(g) The Department shall approve a conservation and reclamation plan if, and only if, the plan complies with this Act and completion of the plan will in fact achieve every duty of the operator required by this Act. The Department's approval of a plan shall be based upon the advice of technically trained foresters, agronomists, economists, engineers, planners and other relevant experts having experience in reclaiming surface-mined lands, and having scientific or technical knowledge based upon research into reclaiming and utilizing surface-mined lands. The Department shall consider all testimony presented at the public hearings as provided in subparagraph (f) of this Section. In cases where no public hearing is held on a proposed plan, the Department shall consider written testimony from county boards when submitted no later than 45 days following filing of the proposed plan with the county board. The Department shall immediately serve copies of such written testimony on the applicant and give the applicant a reasonable opportunity to respond by written testimony. The Department shall consider the short and long term impact of the proposed mining on vegetation, wildlife, fish, land use, land values, local tax base, the economy of the region and the State, employment opportunities, air pollution, water pollution, soil contamination, noise pollution and drainage. The Department shall consider feasible alternative uses for which reclamation might prepare the land to be affected and shall analyze the relative costs and effects of such alternatives. Whenever the Department does not approve the operator's plan, and whenever the plan approved by the Department does not conform to the views of the county board expressed in accordance with subparagraph (f) of this Section, the Department shall issue a statement of its reasons for its determination and shall make such statement public. The approved plan shall be filed by the applicant with the clerk of each county containing lands to be affected and such plan shall be available for public inspection at the office of the clerk until reclamation is completed and the bond is released in accordance with the provisions of the Act.

(j) When the Director determines that the land to be affected is (1) capable of being reclaimed for row-crop agricultural purposes and suitable for row-crop agricultural purposes based on United States Soil Conservation Service soil survey classifications of the affected land prior to mining, and (2) when the Director determines that the optimum future use of the land affected is for row-crop agricultural purposes, the affected land shall be graded to the approximate original grade of the land provided that the final cut and submerged roadways may remain if the Department determines that such final cut or roadways could form a water impoundment capable of supporting desirable uses such as water for livestock or wildlife; and if to be used for fish life, shall have minimum depths in accordance with standards for fish stocking as recommended by the Department, and provided further that the box cut spoil shall be graded in accordance with subparagraph (a) of Section 6;

The reclamation requirements in this Section do not apply to affected land used for a sanitary land fill if such sanitary land fill is approved by the Environmental Protection Agency. The Environmental Protection Agency may regulate the amount of land to be used for the purpose and may establish a time schedule for the orderly and timely completion of such sanitary land fill. Any affected land designated for sanitary land fill and not used for such purpose within 5 years is subject to the reclamation provisions of this Section;

On all affected lands to be graded to the approximate original grade under this subsection (j), all or part of the darkened surface soil, as defined in this Act, shall be segregated during the stripping process and replaced as a final cover as a last step in the required grading. When available in such depth, at least 18 inches of the darkened surface soil shall be segregated and replaced. When less than 18 inches of darkened surface soil exists all such lesser amounts shall be segregated and replaced. In no case under this subsection (j) shall less than the top 8 inches of surface soil, darkened or not, be segregated and replaced. This segregation and replacement requirement may be altered by the Department only if it is determined upon the advice of competent soil scientists that other material available in the cast overburden would be suitable in meeting the reclamation requirements. Below the darkened surface soil the replaced material shall be suitable as an agricultural root medium. The Department shall determine by rules and regulations what constitutes a suitable agricultural root medium by composition and depth. On all lands to be reclaimed under this subsection (j), the operator shall not be required to create a soil condition better than that which existed prior to surface mining.