ILLINOIS POLLUTION CONTROL BOARD May 15, 1980

IN THE MATTER OF:) PROPOSED AMENDMENTS TO CHAPTER 4) OF THE REGULATIONS OF THE ILLINOIS) POLLUTION CONTROL BOARD.)

ORDER OF THE BOARD (by Dr. Satchell):

The Board hereby adopts the revised Chapter 4: Mine Related Pollution which appears below. A Proposed Order was adopted by the Board on December 13, 1979. Differences between the Proposed Order and this Final Order are shown by striking or underlining the words which have been deleted or added. This Order may be subject to modification or withdrawal in the event of comment or objection by the Joint Committee on Administrative Rules.

CHAPTER 4: MINE RELATED POLLUTION

TABLE OF CONTENTS

PART	I:	GENERAL PROVISIONS	Page
101 102 103 104 105 106		Authority	. 1 . 2 . 2 . 2
PART 200 201	II:	DEFINITIONS Terms Defined Elsewhere	• 3 • 3
PART	III:	NPDES PERMITS	
300		Preamble	• 8
301		Incorporation of NPDES Water Rules	•
302		NPDES Permits Required of Certain Dischargers .	
303		Application	• 9
304		Construction Authorization	. 9

PART IV: STATE PERMITS

400 401 402 403	Construction and Operating Permits: State Permits	10 10 11
405		11
404		12
405	Permit Applications: Signatures and Authorizations	
	and the second sec	12
406	Permit Applications: Registered or Certified Mail	
		12
407		13
408	Violations of Conditions and Standards in a Permit	13
409	State Permit Term	14
410	Permit No Defense to Certain Violations	14
411	Permit Review	14

PART V: STATE AND NPDES PERMITS

500	Preamble	14
501	Special Conditions; Agency Guidance Document	14
502	Standard for Permit Issuance or Certification	15
503	Permit Modification When New Regulations Are	
	Adopted \ldots	16
504	Permit Applications	16
505	Surface Drainage Control	18
506	Refuse Disposal	19
507	Experimental Permits for Refuse Disposal	20
508	Permit for Use of Acid Producing Mine Refuse	21
509	Abandonment Plan	21
510	Cessation, Suspension or Abandonment	22
511	Emergency Procedures to Control Pollution	23
512	Mine Entrances	23
513	Permit Area	24

PART VI: EFFLUENT AND WATER QUALITY STANDARDS

600	Preamble	24
601	Averaging	24
602	Sampling, Reporting and Monitoring	
603	Background Concentrations	26
604	Dilution	26
605	Violation of Water Quality Standards 2	

605.1	Temporary Exemption from Rule 605	. 27
606	Effluent Standards	. 28
607	Offensive Discharges	
608	Non-point Source Mine Discharges	

PART VII: COMPLIANCE AND EFFECTIVE DATES

701	Effective Date	30
702	Applications from Holders of Outstanding Permits	
703	Expiration of Outstanding Permits	30
704	Abandonment Plan for Existing Permits	31

PART I: GENERAL PROVISIONS

101 Authority

Pursuant to authority granted by Sections 12 and 13 of the Environmental Protection Act (Act), which empower the Board to designate equipment or facilities capable of causing or contributing to water pollution; to set standards for the issuance of permits for the construction, installation and operation and for the inspection of said equipment or facility; to prohibit the sale, offer or use of articles for reasons of water pollution control; to set standards limiting the amounts or concentrations of contaminants that may be discharged into the waters of the state; to set standards for the filling or sealing of abandoned holes in order to protect groundwater; and to adopt requirements, standards and procedures to enable the state to implement and participate in the NPDES program established by the Federal Water Pollution Control Act of 1972 (FWPCA), as amended, (33 U.S.C. §1251 et seq.), the Board adopts the following rules and regulations.

102 Policy

A policy of the General Assembly in adopting the Act is to restore, maintain and enhance the purity of the waters of Illinois in order to protect health, welfare, property and the quality of life. It is determined that mining activities including the preparation, operation and abandonment of mines, mine refuse areas and mine related facilities without environmental planning and safequards and the use of certain refuse materials can cause, threaten or allow the discharge of contaminants into the waters of Illinois so as to cause or threaten to cause a nuisance or to render such waters harmful or detrimental to public health, safety or welfare or to domestic, commercial, industrial, agricultural, recreational or other legitimate uses including use by livestock, wild animals, birds, fish or other aquatic life and riparian vegetation.

103 Purpose

The purpose of this Chapter is to prevent pollution of waters of Illinois caused by failure to plan proper environmental safeguards for the location, preparation, operation and abandonment of mining activities, mining and mine refuse operations. A permit system is established to ensure-that-such activities-meet-environmental-standards-from control the multitude of contaminating point and non-point source discharges, visible and hidden, continuous and fluctuating, which are potentially present in mining activities, mining and mine refuse operations. In order to ensure that such activities meet environmental standards Water water quality and effluent standards are established to limit discharges from point sources as well as to protect waters for beneficial uses. In addition, procedural safequards are established to ensure the protection of waters. Furthermore, it is the purpose of this Chapter to meet the requirements of Section 402 of the FWPCA.

104 Compliance with Other Laws Required

Nothing in this regulation is intended to be inconsistent with or impair the obligation to comply with the provisions of an Act entitled, "The Surface Coal Mining Land Conservation and Reclamation Act" of Illinois or with any other state or federal law affecting the duties of an operator.

105 Validity Not Affected

If any provisions of this Chapter is adjudged invalid or if the application to any person or in any circumstances is adjudged invalid, such invalidity shall not affect the validity of this Chapter as a whole or of any part, subpart, sentence or clause thereof not adjudged invalid.

106 Repeater

Chapter 4: Mine Related Pollution, effective May 23, 1972 and all amendments thereto heretofore adopted are hereby repealed. If, however, this entire Chapter is adjudged invalid or if its enforcement is stayed by order of any court of competent jurisdiction, this repealer shall be of no force or effect until such time as such judgment or stay is vacated and the validity of this Chapter upheld.

- PART II: DEFINITIONS
- 200 Terms Defined Elsewhere

Unless otherwise stated or unless the context clearly indicates a different meaning, the definition of terms used in this Chapter are the same as those found in the Illinois Environmental Protection Act (Act), (Ill. Rev. Stat. ch. 111 ½, Section 1001 et seq., 1977, the Water Pollution Regulations of the Illinois Pollution Control Board (Chapter 3) and the Federal Water Pollution Control Act of 1972 (FWPCA), (33 U.S.C. 1251 et seq., 1972 as amended). The following definitions which apply to this Chapter can be found in the Act, Chapter 3 or Administrator, Agency, Board, Contamithe FWPCA: nant, Effluent, Federal Water Pollution Control Act (FWPCA), National Pollutant Discharge Elimination System (NPDES), Person, Point Source Discharge, Pollutant, Refuse, Storet, Treatment Works, Underground Waters, Wastewater, Wastewater Source, Water Pollution and Waters.

201 Definitions

For purposes of this Chapter the following terms are defined:

- 201.010 Abandon: To transfer ownership of or to close down mining activities, a mine or mine refuse area with no intention by that operator to reopen the affected land. A mine or mine refuse area which has been inoperative for one year shall be rebuttably presumed to be abandoned.
- 201.020 Acid-producing Material: Material which when exposed to air and water is capable of causing drainage containing sulfuric acid. In determining whether material is acid-producing, consideration shall be given to the sulfur content of the material, the size and spatial distribution of pyritic compounds and other compounds of sulfur, the neutralizing effect of surrounding intermixed materials and the quality of drainage produced by mining on sites with similar soils.

- 201.030 Affected Land: Any land owned or controlled or otherwise used by the operator in connection with mining activities except the surface area above underground mine workings that is not otherwise used for mining activities. The term does not generally include offsite office buildings and farming operations or recreational activities on undisturbed land. A-parcel-of-land-which-has-been reclaimed-and-abandoned-to-the-satisfaction-of-the Agency Land described in a certificate of abandonment issued by the Agency under Rule 510(e) is no longer part of the affected land.
- 201.040 <u>Aquifer: A zone, stratum or group of strata which</u> <u>can store and transmit water in sufficient quantities</u> for a specific use.
- 201.050 Coal Transfer Facility or Coal Storage Yard: Any area where coal is transferred from one mode of transportation to another or where coal is dumped, piled, stored or blended. The term includes but is not limited to coal docks, blending yards, conveyor belts and pipelines. As used in this Chapter, the terms mining activity and mine related facility shall include coal transfer facilities and coal storage yards.
- 201.060 Construction Authorization: Authorization under Rule 403 to prepare to-carry-out <u>land for</u> mining activities or to construct mine related facilities. Construction authorization is issued to a person who holds or is required to have an NPDES permit.
- 201.070 Construction Permit: A state permit issued under Rule 401 which allows the operator to prepare to earry-out land for mining activities or to construct mine related facilities.
- 201.080 Domestic Retail Sales Yard: A business which stockpiles coal or other minerals solely for the purpose of supplying homeowners, small businesses, small industries or other institutions with the mineral for their individual consumption. The term does not include any sales yard located at a mine related-facility.
- 201.090 <u>Drainage Course</u>: Any natural or man-made channel or ditch which serves the purpose of directing the flow of water into a natural waterway.

- 201.100 Facility: A contiguous area of land, including all structures above or below the ground, which is owned or controlled by one person, as-defined-by-Rule-290.
- 201.110 Mine Area or Mined Area: The surface and subsurface land where mining has occurred or is occurring. The term does not include the unmined surface land directly above underground mine workings that which is not otherwise disturbed by mining activities.
- 201.120 Mine Discharge: Any point or-non-point source discharge, whether natural or man-made, from affected land,-mine-area,-mine-refuse-area,-processing-plant, coal-transfer-facility,-coal-storage-yard-or-mine drainage-treatment a mine related facility. Such dis-charges include, but are not limited to runoff-from land, mechanical pumpages, pit overflows, spillways, drainage ditches, seepage from mine or mine refuse areas, effluent from processing, and milling or mineral preparation plant and-other-effluent-discharges. Other discharges from-facilities-or-activities-which are-not-directly-related-to-mining-activities including but not limited to sanitary sewers and sewage treatment works are not mine discharges. Sanitary sewers-and-sewage-treatment-works-are-otner-discharges. The term mine discharge includes surface runoff discharged from a sedimentation pond but does not include non-point source mine discharges.
- 201.130 <u>Mine Refuse</u>: Gob, coal, rock, slate, shale, mill tailings, boney, clay, pyrites and other unmerchantable solid or slurry material intended to be discarded which is connected with the cleaning and preparation of mined materials at a preparation plant or washery. It includes sludge or other precipitated matter produced by the treatment of acid mine drainage but does not otherwise generally include sediment from alkaline mine drainage. The term also includes acid-producing spoil.
- 201.140 <u>Mine Refuse Area:</u> Any land used for dumping, storage and or disposal of mine refuse.
- 201.150 <u>Mine Refuse Pile</u>: Any deposit of solid mine refuse which is intended to serve as permanent disposal of such material.

- 201.160 <u>Mine Related Facility</u>: A portion of a facility which is related to mining activities. The term includes, but is not limited to, the following:
 - (a) Affected land;
 - (b) Coal storage yard or transfer facility;
 - (c) Mine;
 - (d) Mine drainage treatment facility;
 - (e) Mine refuse area; and
 - (f) Processing or mineral preparation plant.
- 201.170 <u>Mining</u>: The surface or underground extraction or processing of natural deposits of coal, clay, fluorspar, gravel, lead bearing ores, peat, sand, stone, zinc bearing ores or other minerals by the use of any mechanical operation or process. The term also includes the recovery or processing of the minerals from a mine refuse area. It does not include drilling for oil or natural gas.
- 201.180 <u>Mining Activities</u>: All activities on a facility which are directly in furtherance of mining, including activities before, during and after mining. The term does not include land acquisition, exploratory drilling, surveying and similar activities. The term includes, but is not limited to, the following:
 - (a) Preparation to-carry-out of land for mining activities:
 - (b) Construction of mine related facilities which could generate refuse, result in a discharge or have the potential to cause water pollution;
 - (c) Ownership or control of a mine related facility;
 - (d) Ownership or control of a coal storage yard or transfer facility;

- (e) Generation or disposal of mine refuse;
- (f) Mining;
- (g) Opening a mine;
- (h) Production of a mine discharge <u>or non-point</u> <u>source mine discharge</u>;
- (i) Surface drainage control; and
- (j) Use of acid-producing mine refuse.
- 201.190 Non-point Source Mine Discharge: Surface runoff from the affected land. The term does not include surface runoff which is discharged from a sedimentation pond or seepage from a mine or mine refuse area.
- 201.200 <u>Opening a Mine</u>: Any construction activity related to preparation for mining on a facility.
- 201.210 <u>Operating Permit</u>: A state permit required of a person carrying out mining activities.
- 201.220 <u>Operator</u>: A person who carries out mining activities.
- 201.230 <u>Permittee</u>: A person who holds a state or NPDES permit issued under this Chapter 4. In some contexts the term permittee also includes a permit applicant.
- 201.240 <u>Person: Any individual, partnership, co-partnership,</u> <u>firm, company, corporation, association, joint stock</u> <u>company, trust, estate, political subdivision, state</u> <u>agency, or any other legal entity, or their legal</u> representative, agent or assigns.
- 201.250 Processing or mineral preparation plant: A facility used for the sizing or separation from the ore or raw mineral of coal, clay, fluorspar, gravel, lead bearing ores, peat, sand, stone, zinc bearing ores or other materials.
- 201.260 <u>Slurry</u>: Mine refuse separated from the mineral in the cleaning process consisting of readily pumpable fines and clays and other materials in the preparation plant effluent. This term includes mill tailings.

- 201.270 <u>Spoil</u>: The accumulation of excavated overburden or other earth, dirt or rock overlying the mineral seam or other deposit excavated from its original location by surface or underground mining.
- 201.280 <u>State Permit</u>: A construction permit or operating permit issued by the Agency. NPDES permits are not state permits.
- 201.290 <u>Surface Drainage Control</u>: Control of surface water on the affected land by a person who is engaging in mining activities. Control of surface water includes diversion of surface waters around or away from the active mining area or mine refuse area and diversion, redirection or impoundment of a stream or impoundment of water for flow augmentation or controlled release of effluents.
- 201.300 <u>Surface Mining</u>: Mining conducted in an open pit including area and contour strip mining.
- 201.310 Underground Mining: Mining conducted below the surface by means of constructing an access facility to the mineral deposit. The term includes slope, drift, shaft mines and auger or punch mining.

Underground-Water-Resources:--Underground-streams; aquifers-and-other-concentrated-bodies-of-water:

- 201.320 Use of Acid-producing Mine Refuse: Use of acidproducing mine refuse includes any use, offer for sale, sale or offer for use in roadway projects, mine roads, mine yards or elsewhere.
- PART III: NPDES PERMITS
- 300 Preamble
 - (a) Part III governs mining activities and permit issuance with respect to holders of an NPDES permit and persons required to obtain an NPDES permit for a facility.
 - (b) As provided by Rule 402, those facilities which operate under an NPDES permit need not obtain a state permit so long as the Agency administers the NPDES permit program.

- (c) Part IV is inapplicable to NPDES permit holders, as provided by Rule 402.
- 301 Incorporation of NPDES Water Rules

Except to the extent contradicted in Chapter 4, the Rules contained in subpart A, Part IX, Chapter 3: Water Pollution shall apply to NPDES permits reguired under this Chapter 4.

302 NPDES Permits Required of Certain Dischargers

Except as in compliance with the provisions of the Act, Board regulations, the FWPCA and the provisions and conditions of the NPDES permit issued to the discharger, the discharge of any contaminant or pollutant by any person into the waters of the state from a point source or into a well shall be unlawful.

- 303 Application
 - (a) A person required to obtain an NPDES permit shall file an application in accordance with Rule 504 on forms provided by the Agency or the United States Environmental Protection Agency as applicable.
 - (b) A person who holds an NPDES permit for a facility or who submits an NPDES permit application for that facility need not apply for a state permit unless and until the Agency notifies that person that a state permit is required for that facility.
 - (c) Application for a renewed or supplemental NPDES permit is governed by the rules on NPDES applications in general.
- 304 Construction Authorization
 - (a) No person shall prepare to-carry-out <u>land for</u> mining activities or construct a mine related facility for which an NPDES permit is required unless:
 - The person holds an NPDES permit containing as a condition a construction authorization for the preparation or construction: or

- (2) The person holds a construction permit for the preparation or construction issued pursuant to Rule 401.
- (b) No permittee shall cause or allow the <u>construc-</u> <u>tion of a new mine related facility or modifica-</u> tion of a mining activity or mine related facility for which an NPDES permit is held unless the NPDES permit includes as a condition a construction authorization for such <u>construction or mod-</u> ification; provided however that construction <u>authorization is not required for modification</u> which would not cause a violation of conditions of the existing permit.
- (c) Any person required to obtain a construction authorization shall make application at least 180 days in advance of the date on which construction or modification is to begin.
- (d) Any person seeking a construction authorization shall furnish information and complete an application as provided in Rule 504. Issuance of a construction authorization shall be governed by the rules which govern issuance of an NPDES permit, including Rules 501 and 502.
- PART IV: STATE PERMITS
- 400 Preamble

Part IV governs mining activities, including construction of mine related facilities, and establishes rules for the issuance of state permits. Exemptions are provided for holders of NPDES permits and for some other mining activities.

- 401 Construction and Operating Permits: State Permits
 - (a) Except as provided in Rules 402 and 403, no person shall:
 - Prepare to-carry-out <u>land for</u> mining activities or construct a mine related facility which could generate refuse, result in a discharge or have the potential to cause water pollution without a construction permit; or

- (2) Carry out mining activities without an operating permit.
- (b) For administrative convenience the Agency may issue joint construction and operating permits. Whether a state permit is construction, operating or joint shall be determined from the language of the entire document. The title given it by the Agency shall not be determinative.
- 402 Exemption from State Permit: NPDES Holder
 - (a) A permittee who holds an NPDES permit for a facility need not have a state permit for that facility.
 - (b) This exemption shall be inapplicable in the event the Agency ceases to administer the NPDES permit program. In this event the Agency shall notify permittees that state permits are required and set dates, not less than forty-five days after notification, on which state permit applications are to be received.
- 403 Exemption from State Permit: Coal Piles and Small Mines
 - (a) Unless the Agency determines that the facility will cause or threaten to cause water pollution or violation of applicable regulations, the following facilities need not obtain state permits:
 - (1) Domestic retail sales yards;
 - (2) Consumer stockpiles located at the consuming facility, including but not limited to power plants and steel mills; or
 - (3) Any facility affecting where mining takes place which affects less than ten acres of land per year and which is does not include a coal, fluorspar, lead or zinc mine related facility.

- (b) An operator of a facility claiming exemption under subsection (a)(3) of this rule shall notify the Agency in writing of the location of the facility and the basis for exemption. The exemption shall date-from <u>be of no effect</u> <u>prior to</u> the time such notice is mailed.
- (c) In the event the Agency determines that a facility will cause or threaten to cause water pollution or violation of applicable regulations or that a facility claiming exemption is not exempt, the Agency shall notify the operator that a permit is required. The An exemption which is valid except that the Agency has determined that the facility will cause or threaten to cause water pollution or violation of applicable regulations shall continue for forty-five days after notification and during the pendency of a permit application before the Agency.
- 404 Applications: Deadline to Apply

A person required to have a state permit shall file an application with the Agency at least ninety days before the date on which the permit is required.

405 Permit Applications: Signatures and Authorizations Required

> An application submitted by a corporation shall be signed by a principal executive officer of at least the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the application form originates. In the case of a partnership or a sole proprietorship, the application shall be signed by a general partner or the proprietor respectively. For all other persons, the application shall be signed by either a principal executive officer, ranking elected official or other duly authorized employee.

406 Permit Applications: Registered or Certified Mail or Hand Delivery Required

- (a) All state permit applications shall be mailed or delivered to the appropriate address designated by the Agency. Any application or revised application sent by mail shall be sent by registered or certified mail, return receipt requested.
- (b) Applications which are hand delivered shall be delivered to and receipted for by any authorized person employed in the permit section of the Agency's Mine Pollution Control Program.
- 407 Supplemental State Permits
 - (a) A permittee may apply for a new or supplemental state permit whenever circumstances arise such that there could be a violation of its previous permit or in other appropriate circumstances.
 - (b) Applications for new or supplemental state permits shall be subject to the rules on applications in general.
- 408 Violation of Conditions and Standards in a Permit
 - (a) No permittee shall violate the conditions and standards contained in its state permit.
 - (b) In addition to the other sanctions provided by the Act and this Chapter 4, the Board may revoke a state permit.--A-state-permit-may-be revoked in appropriate circumstances, including but not limited to the following:
 - Because of existing geological conditions an operator cannot carry out mining activities so as not to cause a violation of the Act or this Chapter 4; or
 - (2) A history of chronic disregard by the permittee for the-mining the Act or Board regulations; or
 - (3) Obtaining a permit by misrepresentation or failure to disclose fully all relevant facts; or

- (4) Other circumstances where it is affirmatively shown that the general standard for permit issuance contained in Rule 502 would not be met if a new application for permit were made.
- 409 State Permit Term

State permits shall have a duration not to exceed five years as specified in the permit.

410 Permit No Defense to Certain Violations

The possession of a state permit is not a defense to violation of the Act or Chapter 4 except for a complaint alleging mining activity without a permit.

411 Permit Review

Any condition or term in a state permit or Agency notification that a permit application is incomplete or inadequate or Agency notification of modification or revocation of an existing permit is a permit denial entitling a person to appeal the Agency's decision to the Board under Section 40 of the Act.

- PART V: STATE AND NPDES PERMITS
- 500 Preamble

Part V governs the issuance of both state and NPDES permits and contains substantive rules governing mining activities and construction of mine related facilities.

- 501 Special Conditions: Agency Guidance Document
 - (a) In addition to the standards and conditions required by this Chapter, the Agency may in granting permits impose such conditions as may be necessary to accomplish the purposes of the Act and which are not inconsistent with Chapter 4. All NPDES permits shall contain those terms and conditions, including, but not limited to, schedules of compliance, which may be required to accomplish the purposes and provisions of the Act.

- (b) The Agency shall adopt such procedures as are necessary for permit issuance under this Chapter. Such procedures shall be included in an Agency Guidance Document.
- (c) The Agency may adopt criteria for the design, operation, maintenance and abandonment of mines,-mine-refuse-areas,-coal-transfer-facilities,-coal-storage-yards,-mine-drainage-treatment-facilities-and-other-wastewater-sources and mine related facilities and other wastewater sources. Such criteria as are adopted shall be set forth in an Agency Guidance Document and shall be revised from time to time to reflect current engineering judgment and advances in the state of the art.
- (d) In adopting new or revised criteria or procedures, the Agency shall comply with the requirements of the Illinois Administrative Procedure Act, Ill. Rev. Stat. 1977, ch. 127 §1001 et seq.
- (e) To the extent the Agency adopts such criteria, they will represent a formal Agency interpretation of what is consistent with the Act and Chapter 4 and necessary to accomplish the purposes of the Act.
- (f) In adopting new or revised criteria the Agency shall consider other applicable state and federal statutes and regulations and shall avoid issuing criteria which conflict with such.
- 502 Standard for Permit Issuance or Certification
 - (a) The Agency shall issue or certify a permit if and only if the operator submits adequate proof that the mine related facilities and mining activities will be constructed, prepared and operated so as not to cause a violation of the Act or Chapter 4.
 - (b) If an Agency guidance document is promulgated and if it contains criteria with regard to any part-or condition of a permit, then for purposes of permit issuance proof of conformity with the Agency guidance document shall be prima facie

evidence of no violation. However, nonconformity with the Agency guidance document shall not be grounds for permit denial if the condition of subsection (a) of this rule is met.

- (c) The Agency may issue under Rule 507 an experimental permit, subsection (a) of this rule notwithstanding.
- 503 Permit Modification When New Regulations Are Adopted

If the Board adopts new regulations affecting the terms and conditions of an outstanding permit, the Agency may issue to the permittee a new or supplemental permit setting forth the affected terms and conditions as modified.

- 504 Permit Applications
 - (a) Plans, reports, specifications and application forms submitted to the Agency as part of a state or NPDES permit application shall be certified by a registered professional engineer when required by the Illinois Professional Engineering Act, Ill. Rev. Stat., ch 48 1/2, 1977.
 - (b) An application for a state or NPDES permit shall include:
 - Location of the affected land and the maximum extent of the affected land during the term of the requested permit;
 - (2) Activities on the affected land to prepare the site for mining activities, including all earth moving, grading activities, construction and any other preparatory activity;
 - (3) Plans <u>Measures to be taken</u> to avoid violation of the Act and Chapter 4;
 - (4) The location of all streams, creeks, bodies of water and underground-water-resources <u>aquifers</u> which receive drainage from the affected land;

- (5) The location of all private water supplies on or within one mile of the affected land;
- (6) The name, type and location of all public water supplies within ten miles of the affected land;
- (7) Plans for surface drainage control as required by Rule 505;
- (8) Areas of the affected land where mining will occur;
- (9) Areas of the affected land where mine refuse and spoil will be deposited;
- (10) The general characteristics of the mine refuse and spoil according to the classification scheme set forth in the Agency Guidance Document or any other general soil classification system acceptable to the Agency;
- (11) The proposed method of mining;
- (12) A refuse disposal plan as required by Rule 506 or 507;
- (13) The location of all bore holes, mine shafts and wells on the affected land;
- (14) An estimate certified by an engineer of the quality and quantity of drainage from the mine area and mine refuse area, including estimates of concentrations of chloride, sulfate, total dissolved solids and all contaminants regulated under Rule 606, together with a statement of the basis of the estimates;
- (15) The location of all point <u>mine discharge</u> <u>points</u> and non-point <u>source mine discharge</u> sources and-discharge-points, method or type of sediment basins, erosion control devices and wastewater treatment facilities for mine-areas,-mine-refuse-areas, all mine

related facilities including designation of collection points for water discharged from all mechanical pumping or gravity flow systems used for draining the mine and mine refuse area;

- (16) An abandonment plan as required by Rule
 509; and
- (17) If the applicant intends to use acidproducing mine refuse, a plan as required by Rule 508.
- (c) The Agency may specify other information necessary to for consideration of the permit application. This may be done by way of an application form, through the Agency Guidance Document and through requests for information directed to the applicant.
- (d) <u>This rule shall not be construed as limiting</u> <u>the Agency's authority to enter into an agreement</u> with the Illinois Department of Mines and Minerals for joint permit applications.

505 Surface Drainage Control

- (a) A state or NPDES permit shall include a plan for surface drainage control as a condition.
- (b) Surface-drainage-shall-be-diverted-around-or away-from-the-active-mining-area-unless-otherwise-provided-by-permit.

The applicant's plan for surface drainage control shall be incorporated into a permit by reference if it meets the standard of Rule 502; otherwise, the Agency shall either deny the permit or issue it with a plan modified by conditions subject to the provisions of Rule 501.

- (c) Mining activities and the deposition of mine refuse shall be planned and conducted so as to avoid contact or interference with waters of the state where such contact can reasonably be expected to cause or allow pollution of such waters.
- (d) Diversion, redirection or impoundment of streams shall be-avoided shall not be undertaken where the Agency demonstrates that there is an economically reasonable alternative.
- 506 Refuse Disposal
 - (a) A state or NPDES permit shall include a refuse disposal plan as a condition.
 - (b) Refuse-disposal-plans-shall-be-subject-to-the standard-for-permit-issuance-contained-in-Rule 502.--The-Agency-may-promulgate;-as-part-of-an Agency-Guidance-Document;-criteria-for-mine refuse-areas-under-Rule-501.

The applicant's refuse disposal plan shall be incorporated into the permit by reference if it meets the standard of Rule 502; otherwise the Agency shall either deny the permit or issue it with a plan modified by conditions subject to the provisions of Rule 501.

- (c) Erosion,-runoff,-flooding,-overflow-or-leachate from-the-affected-land-shall-not-violate Seepage from a refuse disposal area is a mine discharge as defined by Rule 201 which is subject to the standards contained in Part VI of this Chapter.
- (d) The refuse area shall not be located in an area of natural springs or an aquifer recharge area or intercept a drainage course unless special provisions have been made to protect such. The <u>burden of proof shall be on the Agency to show</u> that an area is an aquifer recharge area.
- (c) Acid-producing solid mine refuse shall be immediately spread and compacted in layers and covered as necessary with suitable non-acid-producing material. If wetness prohibits immediate spread-

ing, the refuse shall be spread and compacted as soon as possible and prior to the deposition of a subsequent layer of refuse or cover material. However, the Agency may permit alternate refuse disposal methods.

- (f) Any refuse disposal plan constituting a change from the permitted refuse disposal plan is a revised refuse disposal plan.
- (g) Implementation of a revised refuse disposal plan shall require a new or revised or supplemental NPDES or state permit. Application shall be made within the time limits prescribed for the respective permits as provided by Rule 304 and 404.
- (h) Subsection (e) shall not apply to acid-producing solid mine refuse disposed of underground or in strip pits where disposal is below the level of natural drainage; however, a layer of at least two feet of suitable non-acid-producing material shall be applied no later than one year after completion of a refuse pile in an open pit.
- 507 Experimental Permits for Refuse Disposal
 - (a) To promote the development of the technology of mine refuse pollution control, the Agency may issue experimental permits for refuse disposal not satisfying the requirements of Rule 502 if the applicant demonstrates that the process, technique or system has a reasonable chance for compliance with the Act and Chapter 4.
 - (b) During operation, drainage from an experimental refuse area shall be monitored to determine compliance with the Act and Chapter 4.
 - (c) The Agency may require as a permit condition that I the permittee shall submit performance data and cost information during the operation of the an experimental refuse area at-intervals specified-by-the-Agency.
 - (d) Applications for experimental permits shall comply with the requirements of Rule 504 of this Chapter.

- (e) Agency approval of an experimental permit may be terminated at any time and the requirements of Rule 502 reimposed within forty-five days whenever data or maintenance practices indicate that the experimental method no longer appears likely to meet the requirements of the Act and Chapter 4.
- (f) Within twelve months of the termination of the experimental permit, the permittee shall complete the abandonment plan in the permitted mine refuse disposal area unless otherwise approved by the Agency.
- 508 Permit for Use of Acid-producing Mine Refuse
 - (a) A state or NPDES permit shall include as a condition an adequate plan for use of acidproducing mine refuse if the operator is to use such.
 - (b) As defined by Rule 201, use of acid-producing mine refuse is a mining activity for which a permit may be required under Rule 401.
- 509 Abandonment Plan
 - (a) A state or NPDES permit shall include an abandonment plan as a condition.
 - (b) An adequate abandonment plan shall include; <u>be</u> <u>incorporated into the permit by reference if</u> <u>it includes a</u>
 - (1) Procedures-to-provide-protection-against violations-of-the-Act-and-this-Chapter;-and

(2) A time schedule establishing that the abandonment plan will be executed and completed within one year of abandonment unless otherwise approved by the Agency and <u>meets the standard of</u> <u>Rule 502. If it does not meet that standard the</u> <u>Agency may either deny the permit or issue it</u> with an abandonment plan modified by conditions subject to Rule 501.

- (c) The-Agency-may-further-define-an-adequate abandonment-plan-by-means-of-the-Agency Guidance-Document-promulgated-pursuant-to Rule-501.--The-Agency-shall-approve-an-abandonment-plan-which-conforms-with-subpart-(b) of-this-Rule-and-either-conforms-with-the Agency-Guidance-Document-or-will-result-in abandonment-without-violation-of-the-Act-or this-Chapter:
- (d) (c) Any abandonment plan constituting a substantial change from the permitted abandonment plan is a revised abandonment plan.
- (d) A permittee shall apply for a new or revised or supplemental NPDES or state permit prior to implementation of a revised abandonment plan within the time limits provided by Rule 304(c) or 404.
- 510 Cessation, Suspension or Abandonment
 - (a) A permittee shall notify the Agency in writing by certified mail within thirty days of any of the following:
 - (1) Abandonment; or
 - (2) Cessation or suspension of active mining for thirty days or more unless caused by a labor dispute.
 - (b) During cessation or suspension of active mining, whether caused by a labor dispute or not, the permittee shall provide whatever interim impoundment, drainage diversion and wastewater treatment is necessary to avoid threatened violations of the Act or Chapter 4.
 - (c) Upon abandonment the permittee shall execute and complete the permitted abandonment plan; provided, however, that the permitee need not execute and complete the permitted abandonment plan if the abandonment arises solely from transfer of ownership to a responsible party.

- (d) A responsible party is a person who holds a state or NPDES permit and all other necessary permits for the same facility. If such permit is issued subsequent to the transfer it shall relieve the transferor of the obligation of further executing the abandonment plan.
- (e) Upon request by the permittee the Agency shall issue a certificate of abandonment whenever an abandonment plan has been satisfactorily executed. Refusal to issue a certificate of abandonment is a permit denial for purposes of appeal.
- 511 Emergency Procedures to Control Pollution
 - (a) A permittee shall notify the Agency within one hour of <u>becoming aware of</u> an emergency situation concerning mining activities which causes or threatens to cause a discharge of contaminants into the waters of Illinois. The permittee shall initially notify the Agency by telephone and follow this with written notice including a description of corrective measures taken. The permittee shall immediately undertake necessary corrective measures consistent with Agency approval under paragraph (b) of this Rule. Emergency situations, likely to cause a violation of the Act or Chapter 4, include but are not limited to the following:
 - (1) Dike, levee, dam or pipeline rupture;
 - (2) Flooded pit containing waters which do not meet the standards of Part VI hereunder;
 - (3) Power failure or mechanical breakdown of any wastewater treatment facility.
 - (b) The Agency may temporarily suspend the requirement that a permit be obtained to install and operate any device or facility necessary to correct the emergency situation.

512 Mine Entrances

Bore holes, openings, drill holes, entrances to underground mines and auger or punch mine entries shall be plugged and sealed to the extent necessary to avoid the threat of water pollution. 513 Permit Area

A state or NPDES permit shall specify a permit area. During the permit term no portion of the affected land shall be outside the permit area.

PART VI: EFFLUENT AND WATER QUALITY STANDARDS

600 Preamble

- (a) Part VI applies to mine discharges <u>and non-point source mine discharges</u> as defined by Rule 201.
- (b) Other discharges, including sanitary sewers, are regulated under Chapter 3: Water Pollution.
- (c) A facility which has another discharge will be subject to both Chapter 3 and Chapter 4. Chapter 4 governs mining activities, including mine discharges <u>and non-point source</u> <u>mine discharges</u>. Chapter 3 governs other <u>discharges</u>.
- (d) Except to the extent provided in this Part VI of Chapter 4, Parts II, III and IV of Chapter 3 are inapplicable to mine discharges <u>and non-</u>point source mine discharges.

601 Averaging

- (a) Compliance with the numerical standards of this part shall be determined on the basis of 24-hour composite samples averaged over any calendar month. In addition, no single 24-hour composite sample shall exceed two times the numerical standards prescribed in this part nor shall any grab sample taken individually or as an aliquot of any composite sample exceed five times the numerical standard prescribed in this part.
- (b) Subsection (a) of this rule notwithstanding, if a permittee elects monitoring and reporting by grab samples as provided in Rule 602(f), then compliance with the numerical standards of this part shall be determined on the basis of three or more grab samples averaged over a calendar

602 Sampling, Reporting and Monitoring

- (a) Where treatment is provided for a discharge, effluent samples shall be taken at a point after the final treatment process and before entry into or mixture with any waters of the state.
- (b) Where treatment is provided the permittee shall design or modify structures so as to permit the taking of effluent samples by the Agency at the required point.
- (c) Where treatment is not provided for a discharge, effluent samples shall be taken at the nearest point of access to the discharge source at a point where the discharge leaves the mine or mine refuse area or other portions of the affected land, but in all cases effluent samples shall be taken before entry into or mixture with the waters of the state.
- (d) At a reasonable frequency to be determined by the Agency, the permittee shall report the actual concentration or level of any parameter identified in the state or NPDES permit.
- (e) The Agency may by permit condition require monitoring and reporting on the basis of 24hour composite samples averaged over calendar months. However, grab samples or composite samples of shorter duration may be permitted by the Agency after demonstration that such samples reflect discharge levels over standard operating conditions.
- (f) Subsection (e) of this Rule notwithstanding, if a permittee so requests, the Agency shall by permit condition require monitoring and reporting on the basis of grab samples, in which case Rule 601(b) will apply.

- (f) (g) Monitoring as required in this rule shall continue after abandonment until the permittee has reasonably established that drainage complies with and will continue to comply with the requirements of the Act and this Chapter.
- (g) (h) All methods of sample collection, preservation and analysis used in applying any of the reguirements of this Chapter shall be in accord with the United States Environmental Protection Agency's current manual of practice or with other procedures acceptable to the United States Environmental Protection Agency and the Agency.
- 603 Background Concentrations

Because the effluent standards in this part are based upon concentrations achievable with conventional treatment technology that is largely unaffected by ordinary levels of contaminants in intake water, they are absolute standards that must be met without subtracting background concentrations. However, it is not the intent of these regulations to require users to clean up contamination caused essentially by upstream sources or to require treatment when only traces of contaminants are added to the background. Compliance with the numerical effluent standards is therefore not required when effluent concentrations in excess of the standards result entirely from the contamination of influent before it enters the affected land. Background concentrations or discharges upstream from affected land are rebuttably presumed not to have caused a violation of this part.

604 Dilution

(a) Dilution of an effluent from a treatment works or from any wastewater source is not acceptable as a method of treatment of wastes in order to meet the standards set forth in this part. Rather, it shall be the obligation of any person discharging contaminants of any kind to the waters of the state to provide the best degree of treatment of wastewater consistent with technological feasibility, economic reasonableness and sound engineering judgment.

- (b) In making determinations as to what kind of treatment is the best degree of treatment within the meaning of this paragraph, the following will be considered:
 - What degree of waste reduction can be achieved by process change, improved housekeeping and recovery of individual waste components for reuse; and
 - (2) Whether individual process wastewater streams should be segregated or combined.
- (c) If necessary the concentrations so measured shall be recomputed to exclude the effect of any dilution that is improper under this rule.

605 Violation of Water Quality Standards

In addition to the other requirements of this part, no <u>mine discharge</u> or non-point source mine discharge effluent shall, alone or in combination with other sources, cause a violation of any water quality standards of Chapter 3: Water Pollution. When the Agency finds that a discharge which would comply with effluent standards contained in this part would cause or is causing a violation of water quality standards, the Agency shall take appropriate action under Section 31 or 39 of the Act to require the discharge to meet whatever effluent limits are necessary to ensure compliance with the water quality standards. When such a violation is caused by the cumulative effect of more than one source, several sources may be joined in an enforcement or variance proceeding and measures for necessary effluent reductions will be determined on the basis of technical feasibility, economic reasonableness and fairness to all dischargers.

- 605.1 Temporary Exemption from Rule 605
 - (a) The Agency may by permit provide that a mine discharge shall be exempt from the requirements of Rule 605 as it applies to the discharge of total dissolved solids, chloride, sulfate, iron and manganese.

- (b) A permittee may apply for such exemption as part of a new or renewed or supplemental state or NPDES permit.
- (c) The Agency shall permit such exemption if all of the following conditions are met:
 - The Agency does not demonstrate significant adverse effect on the environment in and around the receiving water;
 - (2) The permittee submits to the Agency adequate proof that the discharge will not adversely affect any public water supply; and
 - (3) The permittee submits to the Agency proof that it is utilizing good mining practices designed to minimize discharge of the parameters to be exempted.
- (d) The Agency may promulgate under Rule 501(c) a code of good mining practices. Compliance with the code of good mining practices shall be prima facie evidence that the permittee is utilizing good mining practices within the meaning of subparagraph (c)(3).
- (e) Whenever the Agency issues a permit exempting a permittee from Rule 605, it shall include in the permit such conditions as may be necessary to ensure that the permittee utilizes good mining practices designed to minimize discharge of the parameters exempted.
- (f) After July 1, 1981 1983, the exemption provided in this Rule 605.1 shall terminate.

606 Effluent Standards

(a) The effluent limitations contained in Part IV of Chapter 3: Water Pollution shall not apply to mine discharges effluents or non-point source mine discharges. (b) No person shall cause or allow a mine discharge effluent to exceed the following levels of contaminants:

	Constituent	Storet <u>Number</u>	Concentration
Ŧ	³ Aciāity	00435	(total acidity shall not exceed total alkalinity)
	³ Iron (total)	01045	3.5 mg/1
	³ Iron (total) ³ Lead (total) 2, ³ Annmonia	01051	1 mg/1
	² , ³ Ammonia		
	Nitrogen (as N) 1, <u>3</u> pH	00610	5 mg/l
	$1, 3_{\text{pH}}$	00400	(range 6-9)
	³ Zinc (total)	01092	5 mg/l
	³ Zinc (total) ³ Fluoride (total) ³ Total suspended	00951	15 mg/1
	solids	00530	35 mg/l

Not subject to averaging.

²Applicable only to an operator utilizing ammonia in wastewater treatment.

³Any-untreated-overflow,-increase-in-volume-of-a-point source-discharge-or-discharge-from-a-bypass-system from-facilities-designed,-constructed-and-maintained to-contain-or-treat-the-discharges-from-the-facilities and-areas-covered-by-this-rule-which-would-result-from a-10-year,-24-hour-precipitation-event,-shall-not-be subject-to-the-limitations-set-forth-in-this-rule-except-for-pH-and-total-acidity. Any overflow, increase in volume of a discharge or discharge from a by-pass system caused by precipitation or snowmelt shall not be subject to the limitations covered by this footnote. This exemption shall be available only if the facility is designed, constructed and maintained to contain or treat the volume of water which would fall on the areas covered by this subpart during a 10-year 24-hour or larger precipitation event (or snowmelt of equivalent volume). The operator shall have the burden of demonstrating that the prerequisites to an exemption set forth in this subsection have been met.

607 Offensive Discharges

In addition to the other requirements of this Chapter, no drainage-from-any-affected-lands-or-operation mine

<u>discharge effluent</u> shall contain settleable solids, floating debris, visible oil, grease, scum or sludge solids. Color, odor and turbidity shall be reduced to below obvious levels.

608 Non-point Source Mine Discharges

Surface drainage from the affected land of a coal mine, including disturbed areas which have been graded, seeded or planted, shall be passed through a sedimentation pond or a series of sedimentation ponds before leaving the facility.

PART VII: COMPLIANCE AND EFFECTIVE DATES

701 Effective Date

This Chapter is effective ten-days-after-its upon filing with the Secretary of State pursuant-to Section-28-of-the-Act.

702 Applications from Holders of Outstanding Permits

- (a) A holder of an outstanding operating permit under the old Chapter 4 may apply for a state or NPDES permit at any time.
- (b) The Agency may by notification require a holder of an outstanding operating permit to apply for a state or NPDES permit.
- (c) Notification shall contain a date, not less than 180 days after notification, by which date an application must be received by the Agency.

703 Expiration of Outstanding Permits.

Compliance with the provisions of this Chapter is required on the effective date except that immediate compliance with the permit requirement of Rule 401 is not required of holders of outstanding permits for mines opened prior to the effective date of this Chapter. For such facilities, compliance with Rule 401 is required upon expiration of the outstanding operating permit. Such permits shall expire upon the occurrence of any of the following conditions, whichever occurs first:

- (a) The lapse of three years after the effective date of this Chapter; or
- (b) The expiration of any NPDES permit held by the permittee for the facility; or
- (c) The lapse of an application period fixed pursuant to Rule 702(c) if an application is not received by the date given in the notification.
- 704 Abandonment Plan for Existing Permits

Rule 106 notwithstanding, the requirement of a permit to abandon contained in Rule 502 of the old Chapter 4, effective May 23, 1972 shall continue to apply to operators of mines opened prior to the effective date of this Chapter 4 until such time as such operator shall have been issued under this Chapter 4 a valid permit containing an abandonment plan.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Order was adopted on the day of <u>Man</u>, 1980 by a vote of <u>Seo</u>.

Møffett, Clerk Christan L. Illinois Pollution Control Board