

ILLINOIS POLLUTION CONTROL BOARD
January 24, 1980

IN THE MATTER OF:)
)
PROPOSED AMENDMENTS TO CHAPTER 4) R76-20
OF THE REGULATIONS OF THE ILLINOIS) R77-10
POLLUTION CONTROL BOARD.)

PROPOSED OPINION OF THE BOARD (by Dr. Satchell):

This matter comes before the Board upon two proposals for regulatory change. On September 21, 1976 Ohio Power Company filed a petition for a change in the definition of mine storage facility, docketed R76-20. On April 20, 1977 the Environmental Protection Agency (Agency) filed a petition proposing to repeal Chapter 4: Mine Related Pollution and substitute a new version, docketed R77-10. On August 18, 1977 the proceedings were consolidated on motion of Ohio Power Company. The proposal in R76-20 was published in Environmental Register Number 135 on August 15, 1976. R77-10 was published in Environmental Register Number 146 on May 2, 1977. Public hearings on the proposal were held in Springfield on October 31, 1977 and in Carbondale on November 2 and 3, 1977. During the course of these hearings, two amended proposals were presented by the Agency.

On November 21, 1978 the Institute of Natural Resources (Institute), pursuant to suggestion made by the Illinois Coal Association at the merit hearings, filed with the Board a proposal for interim regulations (R. 141). On December 14, 1978 the Board ordered the record in this proceeding held open to take evidence on the proposal for an interim regulation concerning total dissolved solids in mine discharge (Rule 605; 32 PCB 321).

An Economic Impact Study (EcIS) was prepared by the Institute. Public hearings on the EcIS were held in Springfield on July 31 and in Carbondale on August 2, 1979. At these hearings evidence was also taken on the merits of the Institute's interim proposal. On September 5, 1979 the Agency filed a third amended proposal. On October 2, 1979 the Illinois Coal Association filed a set of comments. On October 4, 1979 Monterey Coal Company filed its comments. On that same date the Illinois Mine Related Pollution Task Force filed a position paper. On October 11, 1979 the Board received the comment of Directors Michael Mauzy of the Agency and Brad Evilsizer of the Illinois Department of Mines and Minerals.

The hearings were attended by members of the public and representatives of various coal companies and the Illinois Coal Association (Coal Association). Some of the latter were also members of the Task Force. The industry representatives presented testimony and cross-examined witnesses.

SUMMARY OF PROPOSED CHANGES

The Chapter 4 revisions, drafted on the Order dated December 13, 1979, are largely to accommodate the NPDES permit requirement. Currently mines require two environmental permits in Illinois: they must have a Chapter 4 state permit, and, in most cases, an NPDES permit under Chapter 3. The new Chapter 4 provides specifically for Chapter 4 NPDES permits. The Agency regards this permit requirement as essentially duplicative. The new Chapter 4 will exempt from the state permit requirement those mines which hold an NPDES permit (Rule 402).

The Proposal also contains a significant expansion of the scope of Chapter 4 to include coal transfer stations. This was the proposal of Ohio Power Company which was denominated R76-20 and consolidated with the Agency's proposal. This will allow coal transfer and similar facilities to take advantage of the more lenient effluent standards contained in Part VI of Chapter 4 (Rule 201: "Mining Activities"). Since the inclusion of coal transfer facilities under Chapter 4 would represent a significant expansion of the permit requirement, there are also provided exemptions from the permit requirement for smaller facilities (Rule 403).

The effluent limitations contained in Chapter 4 have been revised to more closely follow the federal guidelines. The averaging rule has also been changed to be similar to that found in federal guidelines and in the proposal in R76-21 (Rules 601, 606).

The present Chapter 4 requires an abandonment permit before a mine is abandoned. The Agency has found these provisions to be unworkable. The new Chapter 4 will provide for an abandonment plan which is filed with the permit application and incorporated into the permit as a condition (Rule 509).

Most of the technical rules governing coal mining have been removed from Chapter 4. The remaining document is largely procedural. There is, however, provision for publication of an Agency guidance document which would contain design criteria for coal mines and treatment works (Rule 501). There is a similar provision in the water rules (Water Pollution Rule 967).

Most of the controversy has centered around Rule 605 which is unchanged from the old Chapter 4. This rule requires that coal mine effluents not cause violation of the water quality standards contained in Chapter 3. Apparently most of the coal mines in the state cause such water quality violations with respect to total dissolved solids (TDS), chloride and sulfate. Late in the proceeding the Institute of Natural Resources and the Agency proposed a temporary rule to exempt coal mines from Rule 605 into the year 1981, at which time the Institute intends to propose an alternative to Rule 605 (32 PCB 321). In the interim, compliance will be required with good housekeeping practices contained in a code of good mining practices promulgated by a joint government-industry task force.

STATE OR NPDES PERMIT

Although elimination of duplicate permits and provision for exemption from the state permit requirements will result in dollar savings to the Agency and to the industry, it adds considerable complexity to Chapter 4. A facility carrying out mining activities may fall into one of the following categories:

1. Combined Chapter 3 and Chapter 4 NPDES permit;
2. Chapter 4 NPDES permit;
3. State permit; or
4. Exempt from state permit (and not required to have an NPDES permit).

The following outline determines into which permit category a facility will fall:

1. Does the applicant already possess a Chapter 4 state or NPDES permit for the facility?

--If so, is permit modification required under Rules 304(b) or 407?
2. If not, does the applicant propose to carry out "mining activities" within the meaning of Rule 201?

--If the applicant does not propose to carry out mining activities a Chapter 4 permit is not required under Rule 401.

3. If the application proposes mining activities, then does the applicant already possess a Chapter 3 NPDES permit for the facility [Rule 402(a)]?

--If so, then the Chapter 4 requirements will be written into the Chapter 3 NPDES permit (Rule 302).
4. If the applicant has no NPDES permit, then does the application propose a discharge from a point source into navigable waters within the meaning of the FWPCA (Rule 402)?

--If so, then under Rules 300(a) and 302 the requirements of Chapter 3 and Chapter 4 will be written into one NPDES permit for the facility subject to the standard for permit issuance contained in Rule 502.
5. If an NPDES permit is neither held nor required, then does the facility qualify for an exemption from the state permit requirement under Rule 403?

--If not, a state permit is required under Rule 401.
6. If so, has the Agency notified the facility that a state permit is nevertheless required under Rule 403(c)?

--If so, a state permit will be written pursuant to Rule 401, subject to the general standard for permit issuance contained in Rule 502; otherwise, a Chapter 4 permit is not required, provided the operator notifies the Agency of the location of the facility and claims exemption prior to the filing of an enforcement action [Rule 403(b)].

There are also construction permits (Rule 401) and construction authorizations (Rule 304). These are special, limited state and NPDES permits, respectively. In the case of a facility which already has a Chapter 4 permit, their issuance will amount to a permit modification in the above outline. In the case of a new Chapter 4 facility, the state or NPDES permit first issued will ordinarily be a construction permit or authorization, although there is flexibility on this point.

ECONOMIC IMPACT STUDY

The Economic Impact Study was prepared for the Institute by Dr. William C. Hood and Dr. Donald W. Lybecker. The study found few identifiable costs and benefits and concluded that the economic impact of proposed changes would be minimal. The specific findings

will be discussed with the individual sections which were found to have an economic impact.

The transcripts of the two sets of hearings are not numbered sequentially. It is therefore necessary to distinguish page numbers. "E" refers to a page number in the economic impact hearings, while "R" refers to a page number in the merit hearings.

AGENCY PROPOSAL

At the hearings it was suggested that the Agency's proposal needed to be more carefully drawn (R. 119). It was further suggested that for clarity it was desirable to separate the provisions applicable to: (1) NPDES permits, (2) state permits and (3) both (R. 100). The Agency's response to these criticisms was three amended proposals which adjusted specific rules to meet specific objections. The Agency suggested that the editorial changes were up to the Board (R. 120). Accordingly, the Board has regrouped the provisions from the arrangement in the Agency proposal. After the proposal had been rearranged it became apparent that its lack of structure had hidden a number of circular definitions and conflicting provisions. An effort has been made to eliminate these difficulties. Specific alterations in the Agency's proposal will be discussed with each section. To aid in cross referencing the proposed Opinion and Order to the proposal and the old Chapter 4, the comparable section numbers have been listed in parentheses after the heading of each rule in this Opinion. For example, "P-305" refers to Rule 305 in the Agency proposal and "O-605" is Rule 605 in the old Chapter 4.

PART I: GENERAL PROVISIONS

101 Authority (P-101; O-101)

Rule 101 sets forth the Board's authority to regulate mine related pollution under §§12 and 13 of the Act which concern water pollution. The old Chapter 4 also listed §§9, 21, and 22 of the Act which related to air pollution and land pollution and refuse disposal. These have been omitted from the revision. Mining activities are subject to these provisions of the Act and to the Board regulations adopted under them-- Chapter 2: Air Pollution Control Regulations and Chapter 7: Solid Waste Rules and Regulations, as well as other Board regulations (R. 43).

Mine refuse disposal is regulated by Chapter 4 pursuant to §12(d) of the Act which concerns depositing contaminants upon the land so as to cause a water pollution hazard. It is arguable that mine refuse is also "refuse" within the meaning of §§21 and 22. However, it is not the Board's intention that disposal of mine refuse on a permitted Chapter 4 facility be subject to Chapter 7 as well as Chapter 4.

Since Chapter 3 and Chapter 4 both govern water pollution there must be special rules establishing the respective jurisdictions. Chapter 4 governs mining activities which include mine related facilities as defined by Rule 201. Part VI establishes effluent limits for mine discharges (Rule 600). Other discharges and facilities are regulated under Chapter 3.

102 Policy (P-102; 0-102)

This is largely unchanged from the Agency proposal and the old Chapter 4. The wording has been changed to include the defined terms "mining activities" and "mine related facility" (R. 201).

103 Purpose (P-103; 0-102)

This has been taken largely unchanged from the second paragraph of old Rule 102.

104 Compliance with Other Laws Required (P-105; 0-701)

This has been changed to indicate required compliance with "The Surface Coal Mining Land Conservation and Reclamation Act." The title of the law passed in 1979 differs slightly from the old title (R. 43, 58, 67).

105 Validity Not Affected (P-106; 0-702)

This is unchanged.

106 Repealer

This has been added to the Agency proposal. There is a proviso that if the entire Chapter 4 is found invalid or if its enforcement is stayed, then the old Chapter 4 will again come into effect. There is also a provision in Rule 704 which continues the abandonment permit requirements of old Rule 502 until permits containing abandonment plans are issued.

PART II: DEFINITIONS

200 Terms Defined Elsewhere

This contains a listing of terms used in Chapter 4 which are defined in the Act, Chapter 3 or the FWPCA.

201 Definitions

Abandon : The definition of abandon has been enlarged to include "transfer of ownership." An operator who sells a mine may be obliged to execute an abandonment plan under Rule 509. Under the old Chapter 4 persons attempted to evade their responsibilities for properly closing a site by transfer to a party with insufficient resources to close the site. This change seeks to remedy this (R. 9,; E. 41).

The Agency proposal included "fail to open" under the definition of abandonment. This has been deleted on the Agency's motion. Failure to open will not therefore require execution of the abandonment plan. However, any construction activity related to preparation for mining amounts to opening a mine. Therefore, execution of the abandonment plan will be required unless the operator takes no action whatsoever preparatory to mining.

Acid-producing Material: The definition has been changed slightly to clarify the relationship between pyrite, iron and sulfur. Pyritic compounds include pyrite, marcasite and other compounds of iron and sulfur. These are acid-producing. Other compounds of sulfur include sulfates and organic sulfur. Sulfates are totally oxidized and hence do not, as such, produce acid. Organic and elemental sulfur do not occur in large amounts in Illinois coal, but are acid-producing. The definition has also been changed slightly to specify consideration of the "quality of drainage produced by mining on sites with similar soils." This is in recognition of the fact that little mining actually occurs in the soil itself (R. 84).

Affected Land: The definition has been expanded to include all land owned, controlled or used by the operator in connection with mining activities with the exception of the surface area above underground mines. The old definition included only the actual mined area, refuse area, etc. The definition has also been altered to exclude land once it has been reclaimed and abandoned to the satisfaction of the Agency (R. 10). Under Rule 513 the affected land cannot be outside the permit area during the permit term.

Coal Transfer Facilities or Coal Storage Yard: This is a new definition. Transfer and storage facilities have been included in the definitions of mining activities and mine related facilities and have thus been brought under Chapter 4 regulation. These facilities have much in common with coal mines and often are larger than small mines and pose a similar pollution threat. Effluents from these facilities will now be regulated under Part VI rather than under Chapter 3. Facilities which have NPDES permits will now fall under Part III rather than the permitting provisions of Chapter 3. Facilities which are not required to have NPDES permits may be required to obtain a state permit under Part IV (R. 10, 19, 60; E. 41, 45, 49, 61, 101).

This modification potentially represents a large expansion of the permit requirement. However, Rule 403 provides exemptions from the state permit requirements for domestic retail sales yards and consumer stockpiles. Larger facilities are probably already required to have an NPDES permit, in which event Chapter 4 provisions will be written into the Chapter 3 permit.

The Agency proposal specified that coal transfer facilities and coal storage yards were included not only in the definition of "mining activity," but also in "mining" and "mine area." This usage was in conflict with the general definitions of these terms in the proposal and it is not clear what its purpose was. These have therefore been deleted. However, the definition has been expanded to specify that transfer facilities and coal storage yards are "mine related facilities."

The Economic Impact Study concluded that inclusion of coal transfer facilities and storage yards under Chapter 4 would result both in costs and benefits to the industry. They would have to prepare an abandonment plan at a cost of a few hundred to a few thousand dollars. On the other hand, they will not have to invest as much to construct larger treatment facilities to meet the more stringent effluent standards of Chapter 3 (EcIS 35; E. 41, 45, 61) The looser effluent standards would have some negative effect on the environment. However, most of these facilities are located near major rivers where ample dilution is available (EcIS 17; E. 49, 101).

Construction Authorization: Authorization under Rule 304 to prepare land for 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 (R. 11).

Construction Permit: A permit under Rule 401 allowing the operator to prepare to carry out mining activities or to construct mine related facilities (R.11). A construction permit is a state permit issued to an operator who does not hold an NPDES permit. Under Rule 304 it is possible to issue a construction permit to a person who may be required to apply for an NPDES permit. This will not affect the requirement to obtain an NPDES permit for operation, but may simplify administration in case there is doubt as to which type of permit is required.

Construction of mine related facilities is a mining activity. Construction may therefore be permitted by an operating permit as well as a construction permit. The question is not what the title of the permit is but what the language of the permit allows. The construction permit is a special type of operating permit which will usually be issued for a short period of time to allow the operator to undertake something out of the ordinary routine of mining. The construction permit contemplates eventual application for an operating permit before daily operation is begun.

It would be better to exclude from the definition of mining activities the construction of mine related facilities. Mining could be separated neatly into two worlds of construction and operation, each with its own permit. However, such definition would be difficult because mining is essentially an ongoing construction process. It is not the Board's intent to require operators to make continuous application for construction permits or authorizations as mining proceeds (Comments of Coal Association).

Domestic Retail Sales Yard: A coal stockpile which supplies only homeowners, businesses or small industries or other institutions for individual consumption. This does not include a sales yard located at a mine or mine related facility. On the Agency's motion, a specific exclusion for sales yards which supply large industrial operations has been excluded from the proposal. The word "small" has been inserted in front of industries in the first half of the definition. This does not change the meaning (R. 11, 28; E. 43).

Domestic retail sales yards are excluded from the state permit requirement by Rule 403. This does not, however, exempt such a facility from the requirement of obtaining an NPDES permit if the facility is otherwise required to obtain such a permit, in which case the coal pile will be permitted under Part III of Chapter IV (E. 84).

Drainage Course: Definition unchanged.

Facility: This definition has been added to the Agency proposal. The term was used in that proposal, although undefined, along with "mine," "mining facility," and "operation." A facility is a contiguous area of land, including all structures above or below ground, which is owned or controlled by one person. Two permits are required if there are either two isolated pieces of land with one operator or adjacent tracts with two operators.

The definition of mining activity in the proposal specified "activities on land owned or controlled by the operator . . ." This has been changed to "activities on a facility." The implication that a permit is limited to one operator on one site is now contained in the definition of facility.

The one-site/one-operator limitation, although self-evident is of central importance deserving clarification in a separate definition. Furthermore, it is logically remote from the definition of mining activity, except to the extent that offsite activities are not mining activities within the meaning of Chapter 4.

The facility may be larger than the affected land. It may include undisturbed land and contain within it facilities which are regulated under Chapter 3 as well as mine related facilities. The permit area must be contained within one facility, but the permit area may be less than the entire facility.

It is the Board's intention that a site under control of one operator but bisected by a roadway or other easement should be one facility. In the event there are two closely related, but noncontiguous facilities under the control of one operator, the Agency may allow a combined permit application and issue combined permits, if it is convenient to do so. In the event there are separate surface installations serving a single mine, there will be one facility.

The phrase "owned or controlled" does not require permits of both the owner of record title and, for instance, a lessee. However, in the event control of mining activities is in dispute, the owner may be required to obtain a permit also. Otherwise the permit will be required of the person in control of the mining activities. The fact that two or more persons may be in control of part of the facility is irrelevant so long as only one controls mining activities; e.g., utility easements or farm operations have no effect on "control" for the purpose of determining the extent of the facility.

During the hearings the Agency sought to amend the proposed definition of "operator" to specifically include co-op preparation plants (R. 12, 29; Agency Amendment). The argument had been made that, since there was no one operator, Chapter 4 was not applicable to the co-op. However, "operator" has been redefined to include any person who carries out mining activities. The question centers not on the legal character of the person, but on whether he carries out mining activities. Even if a co-op falls under no other characterization in the definition of "person" in the Act, then it will probably be a partnership within the meaning of Chapter 106 1/2, §6, Illinois Revised Statutes. If the facility is physically separated, then multiple permits may be required. However, if one site is operated by several persons, the Agency may require them to enter into a formal agreement fixing control prior to permit issuance.

Mine Area or Mined Area: Although the definition is largely unchanged, it has been altered to exclude the unmined surface land directly above underground mine workings that is not otherwise disturbed by mining activities. The changes in wording more clearly state the definition (R. 91).

Mine Discharge: Part VI regulates mine discharges. The production of a mine discharge is a mining activity. The Agency proposal did not include a definition of mine discharge. This definition has been taken from Rule 600 (P-301). Since the definition is fairly long it was thought better to set it forth in definitions and then simply use the term "mine discharge" in Part VI.

The proposal brings preparation and milling plant effluents into Chapter 4 for the first time (R. 15). The definition has also been expanded somewhat to include discharge from affected land and runoff from land. The Agency definition was somewhat more limited in scope. This may have been inadvertently omitted from the Agency proposal since it is contained in the old version of Chapter 4 [D-601(a), P-301(a)] (R. 51).

Coal mining is closely connected with activities affecting the land. The exclusion of runoff from part of the affected land from Chapter 4 regulation could have unintended results. It could be argued under the Agency proposal that runoff from the affected land other than from the mining area or the mine refuse area or processing plant, etc., would be regulated by Chapter 3. This could be used to justify required segregation of waste streams where there was no sound environmental reason for doing so. This is not intended, however, to limit the Agency's power under Rule 604 to require segregation of waste streams.

A definition of other discharges is also included. These include sanitary sewers and discharges from facilities and activities which are not directly related to mining activities. Other discharges are regulated under Chapter 3. If a facility with an NPDES permit has both mine discharges and other discharges, they will be regulated by Chapter 4 or Chapter 3 respectively, although there will be one permit only (Rule 302).

Mine Refuse: Definition unchanged (R. 48).

Mine Refuse Area: Definition unchanged.

Mine Refuse Pile: Definition unchanged.

Mine Related Facility: A portion of a facility which is related to mining activities. This is a new definition taken from the Agency's amended proposal, the rule on construction authorization (Rule 304; P-204). That amendment required a construction permit for "any facilities related to mining activities." This has been shortened to "mine related facility" and used throughout. There may be several mine related facilities within a facility. There may also be other facilities, including facilities regulated under Chapter 3.

Mining: The Agency proposal contained an exception from the definition of mining for "dredging operations contained solely in natural bodies of water." In a letter to the Board dated September 26, 1977 the Illinois Department of Conservation objected to this exemption. At the hearings the Agency was unable to explain why this was excluded from the definition of mining (R. 97). This exception has therefore been deleted from the proposal. These operations may, however, be exempt from the state permit requirement under Rule 403. An example of a regulated dredging operation is found in Votava v. Material Service Corp., 2^d District, #78-489 (July 19, 1979).

The wording of the definition has been somewhat changed to include the surface and underground extraction or processing of natural deposits of coal, clay, fluorspar, gravel, lead bearing ores, sand, stone, peat, zinc bearing ores or other minerals. It was pointed out at the hearing that lead and zinc do not occur in their native state in Illinois and that peat is mined in Illinois (R. 93).

Mining Activities: All activities on a facility which are directly in furtherance of mining. This definition, together with the permit requirement of Rule 401, defines the scope of Chapter 4 (R. 11, 70). The Agency's definition has been essentially adopted. However, a listing of specific mining activities mentioned in the proposal have been listed with the definition.

The Agency proposal contained many permit requirements (P-200, 201, 204, 251, 256, 257, 259, 260, 261, 262, 263 and 265). All of these were in conflict with the requirement of an operating permit to carry out mining activities. Many also conflicted with other permit requirements through the use of different language to cover similar activities. These have been brought together under the definition of mining activities. There is now only one permit requirement, the state permits of Rule 401. NPDES permits have been made an exception to Rule 401. This has eliminated conflicting language and provides a simple statement of the scope of Chapter 4.

The Agency's proposal contained several rules stating generally that a permit was required to carry out mining activities or to carry out a special type of mining activity. The proposed Chapter 4 contains several rules of the form: "Do not do A or B," where B is a subset of A. These have been retained for clarity even though they are redundant (Rules 304, 400, 401, 501, 502, 505). It is possible to interpret this as excluding the special type from the definition of mining activity. Therefore the definition of mining activities has been altered to make it clear that the special type is still a mining activity.

Opening a Mine: Any construction activity related to the preparation for mining on a facility. This is a new definition. Once a mine has been opened, it cannot be abandoned without execution of the abandonment plan as provided by Rule 510 (R. 11). Outstanding permits for mines which have never been opened expire on the effective date of this Chapter as provided by Rule 703. Permits issued in the future will include a definite expiration date as provided by Rules 301 and 409.

The Agency proposal specified preparation for mining on "the affected land." This has been changed to "facility" to avoid logical problems since the land cannot be affected prior to opening a mine.

Opening a mine is a mining activity and hence a state permit, construction or operating, is required under Rule 401. A construction permit is required by that section to "Prepare to carry out mining activities or construct a mine related facility which could generate refuse, result in a discharge or have the potential to cause water pollution . . ." Ordinarily a permit will be obtained before the mine is opened. Whether a permit is required for construction activity preliminary to that specified in Rule 401 depends on intent. Turning a spadeful of earth or driving a nail with the intent of ultimately mining is opening a mine, which is a mining activity requiring a state permit. However, the question of intent vanishes once it can be said that a mine related facility has been constructed which could generate refuse, etc. In this case a construction permit is required even if the operator has no intention of mining.

Operating Permit: A state permit required of a person carrying out mining activities as required by Rule 401. An operating permit is not required for a person holding an NPDES permit as provided by Rule 402. Other exemptions from state permit requirements are provided by Rule 403.

Construction permits and operating permits are referred to jointly and severally as state permits. Since mining activities include construction, an operating permit may authorize construction. There is no legal significance to the designation "operating permit" or "construction permit." The language of the permit controls what is permitted.

Operator: A person who carries out mining activities. An operator must have a state permit under Rule 401 unless one of the exemptions of Rules 402 and 403 applies.

The definition has been considerably shortened from the Agency proposal which listed various sorts of persons. This list is quite similar to that found in the definition of "person" found in the Act. This term has been substituted for the list for clarity. It is doubtful the Board has the power to regulate any person who falls outside the scope of the Act (R. 12).

The proposal specified "engages in mining or the generation or disposal of mine refuse or the operation of any coal storage yard or stockpile area." This has been expanded to include all mining activities. The listed practices have been moved to the definition of mining activities.

Under the Agency proposal state permits were required of operators who carried out mining activities (P-251, 256, 257). Apparently there were two tests: Was the person an operator; and, (or?) was he carrying out mining activities? This confusion has been eliminated by making the permit requirement depend on the definition of mining activity only.

Permittee: A person who holds a state or NPDES permit. This is a new term taken from the new Reclamation Law. The Agency proposal spoke of "persons" and "operators." Where from the context a rule seems to apply only to permit holders the term "permittee" has been substituted. A person who holds a combined Chapter 3 and Chapter 4 NPDES permit will be a "permittee" since he will hold an NPDES permit issued under Chapter 4.

Slurry: This definition has been somewhat changed and expanded to include mill tailings.

Spoil: This definition is unchanged, but has been clarified to include "mineral seams or other deposits." This is in recognition of the fact that some minerals do not occur in seams, but occur in lenses or other formations (R. 99).

State Permit: A construction permit or operating permit.

Surface Drainage Control: This definition has been added to the original proposal. An Agency amendment expanded the scope of Rule 505 beyond diversion of surface water around the active mining area to include diversion around mine refuse areas and diversion, redirection or impoundment of streams. At this point it became simpler to define a term for use in the operative rule.

Surface drainage control also includes flow augmentation and controlled release of effluents. These are suggested methods of avoiding violation of the TDS water quality standards which involve stream diversion and/or impoundment. They will require a permit under Rule 401.

Surface Mining: Definition unchanged.

Consideration has been given to bringing this definition into line with the similar definition in the Reclamation Act. However, that act refers only to coal mining, while Chapter 4 covers mining activities in general. It is the Board's intention to include "surface mining operations" as defined by §1.03(24) of the Reclamation Act within the definition of "surface mining" used in Chapter 4.

Underground Mining: The definition has been changed slightly for clarification (R. 12).

Underground Water Resources: Definition unchanged.

Use of Acid-producing Mine Refuse: This definition is derived from the Agency's proposal (Rule 508; P-259). Use of acid-producing mine refuse has been included in the definition of "mining activity" and the permit requirement, by implication, moved to Rule 401: State Permits. Under the old Chapter 4, use of acid-producing mine refuse was illegal (0-404). Under the proposal, the Agency may issue permits (R. 112).

PART III: NPDES PERMITS

300 Preamble (P-200)

The wording of the original proposal has been changed to clarify the NPDES/state permit relationship. Part III applies to mining activities carried out by any person who holds an NPDES permit, regardless of whether he is required to have an NPDES permit because of his mining activities. This part does not seek to alter the law of who must obtain an NPDES permit. However, if a person must obtain an NPDES permit, the Chapter 4 requirements will be written into that permit (R. 12, 19, 69, 100, 103, 167; E. 43, 82, 84). Take, for example, a large mining operation which would not be subject to the NPDES permit requirements except for a small sanitary waste facility. If the sanitary waste facility must have an NPDES permit, then the entire facility is governed by Part III and any Chapter 4 requirements will be written into the NPDES permit. The facility will be exempt from the requirement of obtaining a state permit under Rule 402.

Part III also applies to mining activities carried out by persons required to obtain an NPDES permit. It will be a violation of Part III to carry out mining activities without an NPDES permit if those activities are required to have such a permit. In this case there will also be a violation of Part IV since the exemption from obtaining a state permit will not be applicable if there is no NPDES permit.

301 Incorporation of NPDES Water Rules (P-202)

Except to the extent contradicted in Chapter 4, the rules contained in subpart A of Part IX of Chapter 3 apply to Chapter 4 NPDES permits. This incorporates Rules 901-916 of Chapter 3 into Chapter 4. The permit requirement of Rule 901 is identical to the

permit requirement of Rule 302. The application requirement of Rule 902 has been supplanted by the requirements of Rule 504. Rule 903 is incorporated. Rules 904 through 909 set forth the permit application procedure before the Agency. These are generally incorporated except to the extent they may be contradicted.

Rule 910(a) on general conditions is included in Chapter 4 subject to the special conditions and Agency guidance document provided by Rule 501. Rules 910(b), (c) and (d) concerning water quality standards, wasteload allocation, effluent limitations and new source standards of performance are included. Rules 910(e), (f), (g) and (h) concerning duration of permits, reporting and monitoring, entry and inspection, schedules of inspection and compliance are included. Rules 910(i) and (j) are generally incorporated. Rule 910(k) on maintenance and equipment is incorporated subject to the Agency guidance document of Rule 501. Rules 910(l) and (m) on toxic pollutants and deep well disposal are incorporated. Rule 910(n) on authorization to construct is supplanted by Rule 304.

Rules 911 through 915 are generally included. These are appeal, authority to suspend, modify or revoke, revision of scheduled compliance, variance and public access to information. Rule 916, effective date, is not applicable.

Rule 301 generally incorporates procedural rules applicable to NPDES permit applications except to the extent that these are contradicted by the more particular provisions applicable to mines. This is to be contrasted to Rule 600 which concerns the applicability of the effluent and water quality standards of Parts II, III and IV of Chapter 3. The standards contained in Chapter 3 are generally inapplicable to mine discharges unless otherwise provided.

302 NPDES Permit Required of Certain Dischargers (P-201)

Rule 302 establishes the requirement of an NPDES permit for a Chapter 4 discharger. This merely repeats Rule 901 of Chapter 3 and the requirements of section 301(a) of the FWPCA as applicable to mining activities.

The Agency proposal also specified that an NPDES permit was required of all discharges of pollutants or combination of pollutants from all point sources as defined in the FWPCA into navigable waters. The Board does not disagree with this statement of the NPDES permit requirement. However, this language has been

omitted out of concern that it might be construed not as a guideline to aid persons unfamiliar with the permit requirement but as a new standard for the permit requirement. It is not the Board's intention to change the NPDES requirements in this Chapter 4. Whether the permit is required will be judged solely by Chapter 3 and the FWPCA.

303 Application (P-203)

Rule 303 requires a person to apply for an NPDES permit if he is to engage in a mining activity requiring such a permit. This rule contradicts the present Rule 902(c) of Chapter 3.

303(b) makes it clear that a person who has applied for an NPDES permit need not apply for a state permit. If a person is in doubt as to whether an NPDES or state permit is required, he should first apply for an NPDES permit. If the Agency determines that a state permit is required, it will notify the person and request him to apply for a state permit. There will be no penalty for application for the wrong permit.

303(b) will also be applicable in the event the Agency loses NPDES authority and notifies the permit holders that state permits are required as provided by Rule 402.

304 Construction Authorization (P-204)

Rule 304(b) provides for modification of a mining activity or mine related facility for which the operator already holds an NPDES permit. Modification can be undertaken only pursuant to a construction authorization which will take the form of a condition of a new or supplemental NPDES permit (R. 13, 68).

Rule 304(a) covers the more complicated case in which a person:

1. Seeks to open a mine for which an NPDES permit will or may be required; or
2. Seeks to modify a facility in such a manner that an NPDES permit will be required after the modification but was not before, either because it operated under a state permit or was exempt; or
3. Seeks to modify a facility in such a manner as to bring part of it under Chapter 4 where the facility prior to modification held an NPDES permit but was regulated under Chapter 3.

Rule 304(b) covers the usual situation in which a person operating under an NPDES permit seeks to modify. This will be handled exclusively with a construction authorization. However, flexibility is allowed in the less common situation involving new construction which will bring a facility under Chapter 4 for the first time. These situations could result in confusion. They may be handled either by construction authorization or state construction permit as provided by Rule 401. Rule 304(c) provides that application must be made at least 180 days in advance. Rule 304(d) provides that a person seeking construction authorization will proceed just as though he were applying for an NPDES permit. The Agency may provide construction criteria in its guidance document promulgated pursuant to Rule 501.

The original proposal contained a requirement that the construction authorization not cause a violation of the conditions of the NPDES permit. This has been deleted. The standard for issuance of a construction authorization will be the same as the standard for the issuance of a permit. The question will be whether the modified facility will cause a violation of the Act or Rules. If not, the conditions of the permit will be adjusted to allow the modification. Similar requirements have been dropped from USEPA regulations [40 C.F.R. §124.52(b); 44 Fed. Reg. 32,854, 32,899 (June 7, 1979)]. However, Rule 301 incorporates a similar provision from the present Rule 902(i) of Chapter 3. On December 13, 1979 the Board proposed to delete this in R79-13. The Agency proposal was also specifically conditioned on the validity of existing permits. This has been deleted as unnecessary. The term permit always means valid permit unless otherwise specified. Subsequent to the hearings the Agency proposed an amended version of this rule [P-204(a)]. This amendment has been substantially adopted in altered form.

--- Deleted (P-205)

The Agency proposal contained a rule listing the rules which were applicable to NPDES permits (P-205). This rule has been deleted since the chapter has been restructured to make this clear (R. 101).

PART IV: STATE PERMITS

400 Preamble [P-250; 0-203(a)]

Part IV governs in theory all mining activity and hence anything regulated under Chapter 4. However, the exemptions for holders of NPDES permits and for domestic retail sales yards, consumer stockpiles and some small mines will, as things presently

stand, relegate Part IV to a minor role (R. 69). However, in the event the Agency loses NPDES authority, this will become the principal part of Chapter IV.

401 Construction and Operating Permits: State Permits (P-251, 256, 257; 0-201)

Rule 401 sets forth the requirements of state permits. There are two types of state permits--construction permits and operating permits. These are referred to individually or collectively as state permits (R. 12). Rule 401(c) provides for a joint construction and operating permit to be issued whenever it is not worth the administrative trouble to issue separate permits.

An operating permit is required for a person to carry out mining activities. The definition of mining activities includes construction activities. Therefore an operating permit is sufficient for construction. However, Rule 401(a) provides for a separate construction permit. There has been difficulty with the old Chapter 4 in that it is not clear that construction is a mining activity. In some cases, coal has actually been removed from the ground and sold. Persons have claimed that this was construction and not governed under Chapter 4 so as to require an operating permit. A construction permit is provided in order to make this clear (R. 33).

The separate construction permit will also allow the Agency to review and inspect a facility prior to issuance of the operating permit. In some instances this will provide more flexibility in the permitting process.

It makes no legal difference whether a state permit is denominated a construction permit or an operating permit. The language of the permit will determine what is permitted regardless of the name.

The Agency's original proposal contained two separate rules for when a construction permit was required (P-251, 256). The standard adopted is from the Agency's amended proposal (A.P.-251).

The standard for issuance of a joint permit in the Agency's proposal was that the activities were "sufficiently standard to obviate the need" for separate construction and operating permits. This has been changed to allow a joint permit "for administrative convenience." The Agency should issue a joint permit not only when a standard design is involved, but also in the case of an innovative design if it is more efficient to issue the joint permit. The Agency may also require two permits even if the design is standard (P-251, 256).

The original proposal specified various mining activities for which a permit was required. This has been changed to include all mining activities as defined by Rule 201. The specifics have been moved to the definition of mining activities.

402 Exemption from State Permit: NPDES Holder (P-252, 200)

Rule 402 provides that an operator who holds an NPDES permit for a facility need not have a state permit for mining activities on the facility. Whatever mining activities an NPDES permit holder engages in will be permitted under Part III (R. 12, 19, 69, 100, 167; E. 84). The NPDES exemption will terminate when and if the Agency ceases to administer the NPDES permit program. The Agency's proposal set forth the requirements of the FWPCA and specified that the exemption would not apply unless they were met. Even though the exemption and the Agency's NPDES authority might be conditioned upon the same facts, this construction would raise the possibility of an inconsistent determination of the facts. The proposal has been changed to provide that the exemption ceases whenever the Agency ceases to administer the program for any reason whatsoever.

Rule 402(b) also provides for notice to the NPDES permit holders by the Agency in the event the Agency ceases to administer the program. This is the only way of guaranteeing that the permit holders will learn that a state permit is required. The notification procedure also allows the Agency to determine whether or not it has NPDES authority. The Agency need not give notice until it is convinced it has actually lost the authority with sufficient certainty to justify the inconvenience of processing a large number of state applications. The wording has also been changed to give the Agency authority to set dates upon which applications must be received for state permits. If the Agency deems it necessary, it may spread these dates out over a period for administrative convenience.

The EcIS concluded that elimination of the present system of requiring duplicate state and NPDES permits would result in an annual savings to the Agency of \$3000 to \$5000 and \$200 to \$400 to the mines (E. 43).

403 Exemption from State Permit: Coal Piles and Small Mines (P-252)

Rule 403 provides a further exemption from the state permit requirement for some small mines, domestic retail sales yards and consumer stockpiles located at the consuming facility. The revision has increased the scope of Chapter IV by including under the

definition of mining activities coal transfer facilities and coal storage facilities. These definitions would include domestic retail sales yards and consumer stockpiles. They are also able to take advantage of the more lenient discharge standards found in Part VI. However, it would unduly burden retail sales yards to require them to obtain permits (R. 13, 20, 28, 104). Although consumer stockpiles could include very large facilities, it is expected that most of these will already have NPDES permits. This provision does not create exemption from the NPDES permit requirement (R. 64; E. 84). However, Chapter 4 requirements concerning, for example, a consumer stockpile will be written into the NPDES permit. The Agency retains the right to require a state permit in the event a non-NPDES facility threatens to cause water pollution or violation of the regulations.

Rule 403(a)(3) provides an exemption for any mine affecting less than ten acres of land per year which is not a coal, fluorspar, lead or zinc mine. It is contemplated that among other things, this will provide an exemption for small sand and gravel operations. Since there is a large potential for abuse, the Board has added to the Agency's proposal the requirement of notification by a small mine. This will afford the Agency an opportunity to investigate and will allow it to maintain an accurate list of mining operations in the state.

Since the exemption will date only from the time the Agency is notified of the claim of exemption, this provision will be of limited utility as a defense to operation without a permit. For the exemption to apply, operators who have a mine with a doubtful exemption will have to notify the Agency and submit themselves to an inspection in advance of an enforcement proceeding.

Rule 403(c) sets forth the requirement that the Agency notify the operator that a permit is required and that the exemption is found inapplicable. In the event the operator promptly applies for a permit, he can continue operating without being subject to an enforcement action for operating without a permit.

404 Applications: Deadline to Apply (P-253)

A person who is required to have a state permit must file the application at least ninety days before the date on which the permit is required. This is similar to rules found in Chapter 3 (Rules 902 and 960). Under the Administrative Procedure Act, if a timely permit application is made, the old permit continues in effect after expiration until the new permit is issued. [Ill. Rev. Stat. ch 127, §1016 (1977)]. An applicant will not be able to avail himself of this statute if the application is not filed ninety days prior to expiration.

405 Permit Applications: Signatures and Authorizations
Required (P-254)

This rule is virtually identical with Rule 902(h) of Chapter 3 which is applicable to NPDES permits.

406 Permit Applications: Registered or Certified Mail or
Hand Delivery Required (P-255)

This rule is similar to Rule 959 of Chapter 3.

407 Supplemental State Permits [P-251, 263; 0-203(b)]

Rule 407 sets forth the rule for when supplemental state permits are required. Rule 407(a) specifies that an operator may apply for a new or supplemental permit whenever circumstances arise such that there could be a violation of the previous permit.

The Agency's amended proposal specified that additional state permits are required "whenever mine drainage, mining or mine refuse disposal enters an area not covered by a previous permit or when the treatment or pollution control plans are modified in design or operation" (AP-251). This provoked comment from the Illinois Coal Association and Monterey Coal Company. They objected to dropping the word "substantially" before "modified in design or operation" and to the proposal to require a supplemental permit whenever the mine entered any "area" as opposed to a "new drainage area."

The supplemental permit requirement on entering a new drainage area is taken from the old Chapter 4 [0-203(b)]. Under that rule an operator could mine for an indefinite period at a given location once a permit was issued. The only limitation was a new permit when a new drainage area was entered. The new Chapter 4 is different in that the permit can have a duration of not more than five years. It is possible to project the progress of the mining with greater specificity for a limited period of time. Therefore, Rule 513 has been added to the Agency's proposal. This requires that a state or NPDES permit specify a permit area, the maximum extent of the affected land during the permit term. From the coal operators' comments, this appears to make Chapter 4 more in agreement with the Department of Mines and Minerals' permitting system.

The Agency's proposal contained a substantive rule requiring supplemental permits under certain circumstances. However, application for supplemental permit is a defensive move on the part of

an operator. Therefore, a rule requiring a supplemental permit is unnecessary. Rule 407 has been modified to make it clear that an operator may apply for a new or supplemental permit whenever a change occurs such that there could be a violation of his permit.

Under the Agency proposal, for example, an operator mining beyond the permitted area would violate not only the rule requiring an additional permit, but also the rule against violating a permit condition. The redundancy is unnecessary. The permit should specify with some particularity what it permits. If the operator goes outside the bounds of the permit it is a violation of the permit condition. He must either cease the activity or apply for a supplemental permit.

Inspection of Chapter 3 reveals no similar rule applying to state permits. A substantive rule requiring supplemental permits is not only unnecessary but is redundant and conflicts with the various permit requirements contained in Part V of Chapter 4. For instance, Rule 506 requires a supplemental permit before implementation of a revised disposal plan. Retention of a rule requiring supplemental state permits could also be used as a defense to a complaint alleging operation in violation of a permit condition not specifically listed in the rule requiring supplemental permits. An operator could contend that under his circumstances a supplemental permit was not required and therefore he could change his method of operation without applying for a supplemental permit.

The modified rule gives the Agency control by permit over the supplemental permit requirement. For example, under Rule 501 the Agency is authorized to impose special conditions, which could include details of the design and operation of treatment or pollution control plans. The Agency can be more or less specific about these details in the permit. The degree of specificity will determine the latitude within which the permittee can operate without making a supplemental application.

408 Violation of Conditions or Standards in a Permit (P-270;
 0-206)

Rule 408 requires operators to comply with conditions of their state permit. Rule 408(b) provides for revocation of permits.

The Agency proposal merely stated that a permit could be revoked without giving any standard for revocation. In the Proposed Order, four circumstances warranting permit revocation are listed. These are taken in part from Rule 912(b) of Chapter 3 and in part by analogy with case law developed in connection with solid waste permits (EPA v. Harold Broverman, et al., 28 PCB 123, November 10, 1977).

In connection with an enforcement action, the Board may revoke a state permit if, because of existing geological conditions, an operator cannot carry out mining activities so as not to cause a violation of the law; or, the complainant demonstrates a history of chronic disregard by the permittee of the mining regulations; or, the complainant demonstrates that the permit was obtained by misrepresentation or failure to disclose fully all relevant facts; or, the complainant demonstrates affirmatively that the general standard for permit issuance contained in Rule 502 would not be met if a new application for permit were made. This last circumstance is intended to be the converse for the general standard for permit issuance.

409 State Permit Term [P-268; 0-203(a)]

Rule 409 provides that state permits shall be of a duration not to exceed five years as specified in the permit. The Agency may specify any expiration date up to five years from the effective date of a state permit (R. 267). The Agency proposal specified that permits had a duration of one to five years. This has been changed to remove the requirement that the permit have a duration of at least one year. Rule 910(e), Chapter 3 specifies that NPDES permits be issued for specific terms not to exceed five years. In the past the Agency has issued to coal mines NPDES permits expiring less than one year after issuance. (See EPA v. Zeigler Coal Company, PCB 79-123, Order of November 1, 1979). The minimum requirement has been dropped in keeping with the general policy of this revision of keeping the NPDES and state permits as similar as possible.

The Agency's proposal specified that operating permits, but not construction permits, could have such duration except as provided in paragraph d of Section 33 of the Act. That section establishes the Board's authority to revoke permits. It is unclear why the Board should not have the authority to revoke construction permits also. This exception has been dropped from the rule since it is not only redundant, but appears to conflict with the general rule on revocation of permits found in Rule 407.

The Agency proposal also contained a provision that all operating permits now in effect expire when the earliest NPDES permit expires, but not later than three years after the effective date of this Chapter. This has been moved to Part VII. Not only is this a temporary rule that doesn't belong with the body of the Chapter, but also it does not apply to state permits within the meaning of Part IV. An Agency amendment to the rule on duration of permits which specifies a 180 day period for abandonment plans after effective date of this regulation has also been moved to Part VII.

410 Permit No Defense to Certain Violations (P-269; 0-207)

Rule 410 provides that possession of a state permit is not a defense except to a complaint alleging mining activity without a permit. This is similar to Rule 966 in Chapter 3 and Rule 207 of the old Chapter 4. In an amendment the Agency also sought to expand this rule to cover NPDES permits. The Board rejects this change. Rule 966 of Chapter 3 is not applicable to NPDES permits and there is no similar provision covering NPDES permits. Although the Board has not so held, there is authority for the proposition that compliance with the conditions of an NPDES permit is a defense to a complaint charging violation of related regulations.

On motion of the Agency, language relating to abandonment plans has been stricken. Under the original proposal, operator compliance with its abandonment plan was a defense to abandonment violations. This language was vague and unnecessary since abandonment plans are covered in Rule 509 (R. 53, 77). The Illinois Coal Association objected to this proposed modification. However, the modification is in keeping with the general rule that Illinois permits are no defense to complaints charging violation of the Act or rules.

411 Permit Review (P-272; 0-703)

This follows the general policy of the other Chapters that grant of a permit with objectionable conditions is a permit denial under section 40 of the Act allowing the applicant to appeal. This provision is substantially unchanged from the old Chapter 4, although the language has been altered from that and from that of the Agency proposal. Language has been inserted providing that Agency notification of modification or revocation of an existing permit is also a permit denial. Rule 503 covers permit modification when new regulations are adopted. The added language will allow a permit appeal in the event of Agency notification of modification in such

a case. In some cases Rule 503 notification of modification could amount to revocation of the permit. Language has been added to make certain that there is a right to appeal in this case also.

PART V: STATE AND NPDES PERMITS

500 Preamble

Part V governs mining activities and issuance of permits to operators regardless of whether they hold a state or NPDES permit.

501 Special Conditions; Agency Guidance Document [P-261, 266; 0-205(c)]

Rule 501(a) allows the Agency to impose special conditions on a permit which are consistent with the rules and necessary to accomplish the purposes of the Act. This restates the Agency's authority under §39 of the Act to translate the body of water pollution law into specific requirements which a discharger must meet.

The Agency proposal with regard to special conditions has been reworded to track the language of §39 of the Act [Rule 501 (a), P-205(b) and P-266]. The requirement found in §39(a) that permit conditions not be inconsistent with the Board rules was not included in the Agency proposal and has been added.

Section 39 of the Act sets forth the Agency's authority to impose special conditions in permits. The wording is slightly different depending on whether the permit is state or NPDES. Section 39(a), which applies to permits required by Board regulations, reads as follows: "In granting permits the Agency may impose such conditions as may be necessary to accomplish the purposes of this Act, and as are not inconsistent with the regulations promulgated by the Board hereunder." However, §39(b) of the Act sets forth that: "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 this Act." Therefore, assuming §39(a) of the Act is inapplicable to NPDES permits, the Act does not require NPDES permit conditions to be not inconsistent with Board regulations. This does not necessarily imply that the Agency must ignore Board rules in writing NPDES permit conditions. Section 39(a) provides that the Agency "may

impose" conditions necessary to accomplish the Act's purpose which are not inconsistent with Board rules. However, §39(b) provides that, in the case of NPDES permits, the Agency "shall impose" conditions required to accomplish the Act's purposes. The Act is silent about what additional conditions the Agency may impose in NPDES permits.

Rule 501(b) allows the Agency to adopt permitting procedures. These should include rules of procedure and application forms. They shall be included in the Agency guidance document provided for below.

Rule 501(c) allows the Agency to adopt engineering criteria which will be published with the Agency guidance document. These should represent minimal designs and practices which the Agency will accept for permit issuance.

Rule 501(e) has been added to the Agency proposal. Although §39 of the Act confers authority on the Agency to adopt rules governing permit procedures, the Agency has no authority to promulgate substantive rules pursuant to §§12 and 13 of the Act. This authority is given to the Board and there is no authority for subdelegation to the Agency (E. 80). Rule 501(e) has been added to clarify the nature of the criteria which the Agency may promulgate.

The Agency necessarily has the power to develop guidelines for permit issuance to be used within the Agency. Rules 501(c) and (d) contemplate publication of these guidelines as criteria. The criteria will represent a formal statement of what the Agency will not challenge in a permit application. The criteria are not rules and will not bind any party other than the Agency.

Although these are not rules in the usual sense of the word, they are rules within the meaning of the Administrative Procedure Act, Ill. Rev. Stat. ch. 127, §1003.09:

"Rule" means each Agency statement of general applicability that implements, applies, interprets, or prescribes law or policy, but does not include (a) statements concerning only the internal management of an agency and not affecting private rights or procedures available to persons or entities outside the agency, (b) informal advisory rulings issued pursuant to Section 9, (c) intra-agency memoranda or (d) the prescription of standardized forms.

The criteria will amount to an Agency statement that interprets law or policy. They will be of general applicability and not informal advisory rulings issued to individual petitioners as contemplated by §1009 of ch. 127. Publication of the rules in conformity with the Administrative Practices Act is therefore required (E. 82; Third Amended Proposal).

502 Standard for Permit Issuance or Certification (P-267; 0-202)

Rule 502(a) sets forth the standard for permit issuance. This is the usual standard for permit issuance that the operator present evidence to demonstrate that there will not be a violation of the Act or rules (§39 of the Act).

Rule 502(b) further sets forth the function of the Agency guidance document. Where the guidance document contains criteria with respect to some part or condition of the permit, then the applicant may demonstrate conformity with the criteria of the guidance document in lieu of demonstrating that there will be no violation of the Act or Rules. However, since the guidance document does not constitute rulemaking, nonconformity with the criteria will not be grounds for permit denial, provided the general standard for issuance is met. For an Agency interpretation of the comparable Rule 967 of Chapter 3, see 3 Ill. Reg. 36, p. 226 (September 7, 1979).

As an example of the function of the guidance document, consider that the Agency might issue criteria to the effect that refuse piles shall have a slope no greater than 10%. The permit applicant will be free to offer evidence that a slope of 12% under the circumstances will not cause a violation of the Act or Chapter 4. However, the Agency will not be allowed to argue that under the circumstances a maximum slope of 8% is required. The function of the guidance document is to provide guidance by permitting the Agency to set forth minimal standards. An applicant can assure himself of prompt permit issuance by conforming to the criteria of the guidance document.

The Agency's proposal required that as a condition for permit issuance the applicant demonstrate that he had conformed with all conditions in the construction permit. If such a requirement is to be imposed at all, it should also be applicable to construction authorizations. However, it has been deleted from the proposal altogether. The permit will be issued if it is shown that no violation will occur regardless of whether the

applicant conformed to the conditions of the construction permit. If the applicant breached the construction permit this will be grounds for an enforcement action, but standing alone it should not prevent issuance of an operating or NPDES permit if the general standard for permit issuance is met. Revocation of the permit could, however, be imposed as a sanction in the enforcement action in an appropriate case under Rule 408 or under Rule 916 of Chapter 3.

503 Permit Modifications When New Regulations Are Adopted
(P-271)

Rule 503 provides that the Agency may issue a supplemental permit setting forth affected terms and conditions in the event the Board adopts new regulations (R. 116). This has been completely changed from the Agency's proposal which would have provided for modification of permits by operation of law. Violation of permit conditions frequently carries more severe penalties than violation of regulations. The more severe penalties are warranted in part because the operator has been afforded notice of particular provisions in regulations by way of the permit and because regulations have been made more specific when incorporated into the permit. Modification of the permit by operation of law would defeat these policies of the permit system. Rule 503 as adopted conforms with the similar provision contained in Rule 968 of Chapter 3.

504 Permit Applications (P-258; 0-204)

Rule 504 sets forth what information must be provided in a permit application. This is further specified in the sections which follow (E. 26).

The Agency proposal specified that soil classification was to be according to Grandt and Lang, Reclaiming Illinois Strip Coal Land with Legumes and Grasses. This book is out of print. The Agency will reproduce it in the guidance document (R. 106).

The Agency proposal specified that the application must comply with the conditions of the Agency guidance document. This has been deleted. If the Agency were empowered to specify conditions which had to be met, the result would be an improper delegation of rulemaking authority. However, the Agency is permitted to request more information or more particular information than that listed in Rule 504. It may do this either through an application form, the Agency guidance document or specific requests for

information. However, failure to comply with criteria of the guidance document or inability to supply all information will not alone be grounds for permit denial absent a showing that the criteria or information is necessary in the particular case. The Coal Operators' comment that this is "beyond the bounds of reason" is answered by the requirement of "necessary information."

Subsequent to the hearings the Agency specified certain additional information. This has been rearranged and incorporated into Rule 504. The Coal Operators' comments are discussed in connection with Rule 505.

505 Surface Drainage Control [P-260; 0-301(a), 301(b)]

Rule 505 provides for control of surface drainage by permit. Surface drainage must be diverted around or away from the active mining area. Other mining activities and mine refuse disposal must be planned to minimize contact with waters of the state if such contact could result in pollution. Stream diversion is to be avoided.

The original proposal provided only for diversion around the active mining area. An Agency amendment expanded the scope of Rule 505 to include diversion, redirection or impoundment of streams and a rule requiring that mining activities and deposition of spoil be conducted so as to avoid contact or interference with waters of the state. These amendments have been incorporated in altered form.

The Agency amendment sought to expand the scope of Rule 505 to afford the Agency the level of control it presently has under old Rule 301 of Chapter 4. Apparently in its original proposal the Agency restricted its authority inadvertently.

Some specific requirements of old Rule 301 have been omitted. These include certain mandatory diversion and impoundment provisions. In dropping these requirements the Board does not intend to disavow them. They are mining practices which carry a risk of water pollution. The Agency may provide for these matters in the Agency guidance document and may write specific requirements into permits to prevent water pollution.

Rules 505(b), (c) and (d) set forth substantive rules governing the conduct of mining activities. Rule 504(b)(7) requires a plan for surface drainage control as part of a permit application. This plan will be incorporated into the permit as a condition.

Rule 201 defines surface drainage control as control of surface water on the affected land by a person who is engaged in mining activities. Surface drainage control includes the practices governed by Rule 505(b), (c) and (d). In permitting surface drainage control, the Agency shall consider not only whether compliance with the requirements of Rule 505 has been shown, but also whether the plan will avoid other violations of the Act and Chapter 4.

The definition of surface drainage control has been expanded to include flow augmentation and controlled release of effluents as a method of avoiding violation of the TDS and related water quality standards. These practices may previously have been considered illegal, although this Opinion clarifies this. They will require a permit under Rule 401 since they will involve stream diversion or impoundment. There is no special rule governing permit issuance in this case other than the general standard of Rule 502.

Rule 505(a) requires the Agency to impose a surface drainage plan as a permit condition. The Coal Association objected to this and in general to the incorporation of the specific rules on stream relocations. Their contention was that this was provided in the Department of Mines and Minerals permit and application form which was reviewable by the Agency. They also objected that the Agency did not presently have control over the permitting of stream relocations. However, inspection of the old Chapter 4 at Rule 301(a) and (b) reveals that the Agency does presently have such control.

At the hearings the Agency indicated that the various state agencies responsible for permitting coal mines would develop a single application form which would be circulated. The Coal Association's objection that the surface drainage control provisions would be burdensome is answered by their contention that the application is already required by Mines and Minerals (R. 27).

The Coal Association's comments further infer that there is a legislative intent in the Reclamation Act to exempt coal operators from the permit requirements of the Act. Of course the bulk of the coal mines are required to have NPDES permits and the state permit requirement will be inapplicable to them. It is beyond the power of the state legislature to provide exemptions from the NPDES permit requirement.

The Reclamation Act does, as the Coal Association contends, provide for Agency input and comment in the mines and minerals permitting procedure. However, a careful examination of the Reclamation Act indicates that the Agency's function is advisory. There is no provision for a veto by the Agency in permit issuance from Mines and Minerals. Furthermore, section 3.20 of the Reclamation Act provides that "all requirements of the Illinois Environmental Protection Act and rules and regulations thereunder shall be complied with fully at all times during mining, reclamation and after reclassification." The Board cannot find from this a legislative intent to exempt coal mines from the state permit requirements.

506 Refuse Disposal (P-262; 0-401, 402)

Rule 506(a) requires that a state or NPDES permit contain a refuse disposal plan. An applicant must submit a plan under Rule 504(b)(12). The plan will be made a permit condition if it satisfies the standard for permit issuance contained in Rule 502. The applicant must show that there will be no violation of the Act or rules, including Rules 504(c), (d) and (e) which are substantive rules governing mining. The Agency may promulgate mine refuse criteria under Rule 501.

Rule 506(c) provides that runoff, etc., from the affected land must meet the standards contained in Part VI. Note that runoff from the affected land is a mine discharge under Rule 201 [0-401(a)(1)]. Rule 506(d) provides that refuse areas must not be located in an area of natural springs or aquifer recharge area or intercept a drainage course without special protective measures [0-401(a)(2)].

Rule 506(e) establishes rules on spreading and compacting. These are reminiscent of the solid waste rules. The original proposal specified only that acid producing solid mine refuse be spread and compacted and covered when necessary with "non-acid-producing material." This has been modified to include the word "suitable" before "non-acid-producing material." Impermeable clay would be a suitable cover material in that it would prevent water and air from reaching the acid-producing material. However, the Agency may approve other suitable materials. Rule 506(e) permits alternate refuse disposal methods at the Agency's discretion (R. 15, 114). These will be subject to Rule 502.

Rule 506(f) and (g) govern revised refuse disposal plans. This establishes a special rule on when a new or supplemental permit is required. A new permit is required if the revised plan contains any change from the permitted plan. Rule 506(d) requires that a revised disposal plan result in a new permit application which must be made prior to implementation of the revised plan, ninety days before for a state permit and 180 days for an NPDES permit.

The original proposal defined revised disposal plan as one with a "substantial" change. On the Agency's motion and over the Coal Association's objections the word "substantial" has been deleted. A new permit is required before there is any deviation from the permitted plan. Of course the Agency can be more or less specific in permit conditions as required to assure that the standard of Rule 502 will be met.

The original proposal also required application to be made ninety or 180 days prior to "completion" of the plan. The Agency recommended deletion of this word, but the amended proposal could still have been interpreted to require application ninety or 180 days prior to mere possession of the plan. This would be difficult to administer since submission of a plan is a necessary condition for the new application under Rule 504. The adopted rule specifies "implementation" of the plan. Implementation will occur when the first action is taken pursuant to the revised plan and contrary to the permitted plan.

507 Experimental Permits for Refuse Disposal (P-264; 0-403)

Rule 507 provides for experimental permits for refuse disposal. The standard for issuance of an experimental permit is not the same as usually applied to permit issuances by Rule 502. The experimental permit may issue if the operator demonstrates a reasonable chance for compliance with the Act and Chapter 4. The rule sets forth special monitoring and reporting requirements. The procedure is laid out for notice and termination of the experimental permit (R. 114).

The original proposal required that the disposal area not be the "principal area for disposal of acid-producing refuse unless approved by the Agency." This language has been deleted. It adds nothing to the proposal since no permit would issue without Agency approval. It is not the Board's intention, however, that experimental permits should often be issued for a principal disposal area.

508 Permit for Use of Acid-producing Mine Refuse (P-259; 0-404)

Rule 508 requires that a state or NPDES permit include as a condition a plan for the use of acid-producing mine refuse if the operator is to use such. The definition of acid-producing mine refuse has been moved from its place in the proposal to definitions. Use of acid-producing mine refuse is a mining activity as defined by Rule 201 for which a permit is required under Rule 401 (R. 112).

The original proposal specified that use of acid-producing mine refuse was restricted to holders of operating permits. On the Agency's motion, this requirement has been deleted. There is no obvious reason why this rule should not also be applicable to holders of NPDES and construction permits.

Rule 504(b)(17) requires a plan for use of acid-producing mine refuse in a permit application. The Agency may set forth in an Agency guidance document under Rule 501 criteria for the use of acid-producing mine refuse. The standard for issuance of a permit for use of acid-producing mine refuse is that contained in Rule 502.

Rule 404 of the old Chapter 4 contained an absolute proscription of use or offer of acid-producing mine refuse. This proposal would allow such use by permit.

509 Abandonment Plan (P-261; 0-502)

Rule 509 provides that an application for a permit include an abandonment plan. The permit will include an adequate plan as a condition. This represents a drastic departure from the present Chapter 4 which requires an abandonment permit subsequent to abandonment of the mine. The Agency has had considerable difficulty with enforcing the requirement of an abandonment permit. Requiring the abandonment plan will force the operator to confront the problem prior to abandonment and the operator will no longer be able to claim ignorance of the requirement to take steps on abandonment (R. 14, 20, 39, 54, 66, 78, 112).

The EcIS was able to quantify the economic costs of this. This represents one of the few identifiable costs associated with this revision. An abandonment plan likely involves an engineering fee of \$1000 or more. This fee will have to be paid prior to

application for the permit. This requirement therefore increases the capital investment required to open a mine and obtain a permit. The cost of mining is increased somewhat by the cost of tying up this capital for the period of time the mine is open (E. 42, 44, 99).

Rule 509(b) defines an adequate abandonment plan. The plan must provide a time schedule for completion of abandonment work within one year. Subsequent to abandonment, however, the Agency may approve departures from the plan that would allow for completion over a period of more than one year.

Rule 509(c) provides that the Agency may further define an adequate abandonment plan by means of the Agency guidance document. However, the Agency must approve an abandonment plan upon a demonstration that it will provide protection against violations regardless of whether it conforms with the Agency guidance document.

Rules 509(d) and (e) provide for revised abandonment plans. A revised abandonment plan is one constituting a substantial change from the permitted one. Substantial will be defined on a case by case basis. It will be a violation if an operator implements a revised abandonment plan without having applied for a revised permit ninety days prior to implementation (R. 166, 168).

510 Cessation; Suspension or Abandonment [P-261; 0-501(a)]

Rule 510 covers cessation, suspension or abandonment. The original proposal covered the abandonment plan, permitting requirements and substantive rules on abandonment in one rule. These have been separated into two rules.

Rule 510(a) provides that the operator notify the Agency within thirty days of abandonment, cessation or suspension of mining. The original proposal provided that notification was unnecessary if abandonment was caused by a labor dispute. The language has been clarified and the labor dispute section applies only to cessation or suspension. The Agency must be notified of abandonment regardless of the cause.

Rule 510(b) makes it clear that the operator must provide interim impoundment, etc. to avoid violations of the Act during cessation or suspension of active mining. The operator will also be required to avoid violations during execution of the abandonment plan.

Rule 510(c) sets forth the rule that the abandonment plan must be executed upon abandonment. The definition of abandonment includes transfer of ownership. This represents a substantial change from the existing Chapter 4. In the past operators have avoided their responsibilities for properly abandoning a mine by transfer of ownership to an insolvent corporation. Such a transfer will be an abandonment under the new Chapter 4 and the transfer will not allow the operator to escape responsibility for adequately closing the site (R. 14, 20, 39, 54, 66, 78, 112).

Rule 510(c) provides a defense to the requirement to execute the abandonment plan in the event the operator demonstrates that the transfer of ownership was to a responsible party. A responsible party is someone who has already obtained permits to operate the same mine. If the mine is transferred to a party who does not have a permit at the time of transfer but subsequently obtains one, the transferor will be relieved of the obligation of further executing the abandonment plan. However, if the transferor has failed to perform part of the plan during the interim, there will have been a breach of the permit condition which will not be excused.

It is assumed that a transferee who will be financially unable to execute an abandonment plan will be unable to obtain the necessary permits to operate the mine. In particular he will be unable to meet the bonding requirements of the Mine Reclamation Act.

511 Emergency Procedures to Control Pollution [P-265; 0-205(a), 205(b)]

Rule 511 sets forth emergency procedures. The original proposal required that the operator notify the Agency "immediately" of an emergency situation. The requirement of immediate notification has been changed to notification within one hour. It is feared that immediate notification may be impossible and hence would not be enforced. It appears that notification within one hour would be in all events possible and hence enforceable (R. 114

The Agency proposal was also limited to "sudden discharges. This has been changed to include any discharges caused or threatened by an emergency. The Agency should be notified of any emergency that could result even in a slow leak.

512 Mine Entrances [0-301(a) and (c)]

Bore holes, openings, drill holes, entrances to underground mines and auger or punch mine entries must be plugged and sealed to the extent necessary to avoid the threat of water pollution. This is taken from the old version of Chapter 4, Rule 301. It has been added to the Agency proposal on the assumption that it was inadvertently omitted in the revisions.

513 Permit Area [P-263; 0-203(b)]

Rule 513 requires that a state or NPDES permit specify a permit area. During permit term no portion of the affected land may be outside the permit area. This is a new provision which was not in the Agency proposal. The term "permit area" is taken from the Reclamation Act.

Subsequent to the hearing, the Agency sought to amend its proposal to specify that additional state permits were required whenever mine drainage, mining or mine refuse disposal entered an area not covered by a previous permit. The Coal Association objected to this and apparently construed it to mean a new application was required each time a shovel took a bite out of a coal seam. Consideration of this dispute led to the recognition that there was no provision in the Agency proposal requiring that the permit specify a geographical area. Accordingly, Rule 513 has been added to clarify this.

Under Rule 504(b)(1) the permit applicant must specify the location of the affected land and the maximum extent of the affected land during the term of the requested permit. If there is some area in the proximity of the facility into which mining cannot proceed without violation of the general standard for permit issuance under Rule 502, the Agency should exclude that area from the permit area. Otherwise the Agency should grant a permit area which will be consonant with the permit term.

PART VI: EFFLUENT AND WATER QUALITY STANDARDS [P-301; 0-601(a)]

600 Preamble

Part VI applies to mine discharges as defined by Rule 201. If a mining activity has both a mine discharge and another discharge, it will be subject to both Chapter 3 and Chapter 4. Chapter 4 will govern the mining activities, including mine discharges. Chapter 3 will govern the other discharges (R. 15).

Rule 600(b) provides that except to the extent provided Part VI, Parts II, III, and IV of Chapter 3 are inapplicable to mine discharges. In particular the effluent standards of Part VI are inapplicable to mine discharges and are supplanted by the discharge limitations specified in Rule 606. The old Chapter 4 does not make this altogether clear. The parameters of Chapter 3 which are not mentioned in Rule 606 are unregulated for mine discharges (E. 56). The water quality standards of Parts II and III are incorporated by Rule 605 which provides for water quality related effluent standards. This is substantially unchanged from the present Chapter 4.

Part VI applies to mine discharges from facilities even if they may be exempt from the state permit requirements under Rule 403. Likewise Part VI applies to any incidental mine discharge from a facility which possesses a Chapter 3 NPDES permit.

601 Averaging [P-301; 0-601(d)]

Rule 601 sets forth the averaging procedure. Compliance with the numerical standards is determined by averaging 24-hour composite samples over a calendar month. No 24-hour composite sample may exceed two times the numerical standard and no grab sample may exceed five times the standard.

On motion of the Agency the period was changed from thirty consecutive days to a calendar month. This is in line with federal rules and R76-21 where objection was voiced to the thirty day period. Although the calendar month is somewhat arbitrary, it is in line with other reporting requirements and eliminates one degree of freedom in determining compliance (R. 15, 51; First Amended Proposal).

This averaging rule is a substantial change from the averaging rule set forth in Rule 601(d)(1) and (2) of the old Chapter 4. The old rule made a distinction as to whether treatment other than impoundment is provided. Where no other treatment was provided, the discharge limits had to be met at all times, but where treatment other than impoundment was provided, the standards were determined on the basis of 24-hour composite samples with no grab sample over five times. This has been eliminated.

In the Agency proposal the averaging rule was contained within the rule on reporting and monitoring. It has been placed in a separate rule to emphasize importance of averaging and to more clearly distinguish the difference between averaging and reporting. Averaging is a substantive rule of evidence whereas

reporting and monitoring are rules relating to permits and permit conditions. In addition, placement of the averaging rule within the provision for reduced monitoring and reporting after demonstration of sample reliability implied that the averaging rule itself could be altered by permit. This is not the case.

602 Sampling, Reporting and Monitoring [P-301, 302; 0-601(b) and (c), 603, 604]

Rule 602 provides for sampling, reporting and monitoring. A similar provision is Rule 501 of Chapter 3. Rules 602(a) and (c) provide for sampling points. Where treatment is provided, sampling is to be between final treatment and mixture with waters of the state. Where treatment is not provided, samples are to be taken at the nearest point of access, but again before mixture with the waters. Rule 602(b) provides that the operator shall design and modify structures so as to permit the taking of effluent samples. The Agency proposal only required design and modification of "structures for discharging treated wastes." This has been changed to "structures" in general. It may be necessary to design or modify structures other than the discharge facility itself in order to provide access.

Rule 602(d) provides that an operator report the actual concentration or level of any parameter identified in the permit at a reasonable frequency to be determined by the Agency. The reporting requirement will be specified in the permit (R. 16). Recent cases have challenged the authority of the Agency to require monitoring and reporting of parameters other than those for which effluent limits are specified in the permit. The intent of this section is that the Agency may specify not only those parameters for which effluent limits are set, but also parameters for which water quality levels are set by regulation or any other parameter it deems necessary to have monitored.

Rule 602(e) sets forth that reporting and monitoring are presumptively on the basis of 24-hour composite samples averaged over a calendar month. However, the Agency may permit lesser reporting. Rule 602(f) provides for monitoring after abandonment. Rule 602(g) incorporates the USEPA's current manual of practice. This was a separate section under the Agency proposal, but it has been included since it logically relates to reporting and monitoring.

603 Background Concentration [P-303; 0-601(e)]

Rule 603 provides that the background level of contaminants in intake water are not to be deducted in order to determine compliance with the effluent standards. This is the same as Rule 601(e) of the old Chapter 4 and is largely the same as Rule 401(b) of Chapter 3 (R. 16).

Because mining activity necessarily disturbs the land and the flow of water over and through the land it is the intent of this Chapter to regulate certain discharges which in other contexts might be deemed background concentrations. As used in this Chapter, background concentration does not include contaminants naturally occurring in underground waters which are brought to the surface as a result of mining activity or which are pumped from one underground formation to another. Also it does not include contaminants picked up by surface water as it flows through the affected area.

604 Dilution (P-304; 0-602)

Rule 604 provides that dilution of effluents is not an acceptable treatment method. This is similar to Rule 602 of the present Chapter 4 and virtually identical with Rule 401(a) of Chapter 3 (R. 17, 116). Language relating to place of sampling has been deleted from the Agency proposal. This language is also contained in Rule 401(a) in Chapter 3. It has been eliminated because it is provided in and may conflict with the sampling point rules provided by Rule 602.

The dilution rule interacts with Rule 605 which provides that effluents may not cause a violation of water quality standards. In the hearings on this proposal and in R76-7, concern was expressed that the dilution rule prevents certain treatment methods for chlorides, sulfates and TDS. In particular it was feared that controlled release of impounded water was proscribed by this rule. Controlled release of high TDS water during periods of naturally occurring high flow in streams is not dilution. In this case the mixing occurs at a point after the discharge.

Another possible technique of avoiding a TDS water quality violation would be impounding surface water during wet periods and augmenting the flow of the receiving stream during dry periods to dilute effluents. This would not constitute a violation of the rule against dilution. However, it could constitute surface drainage diversion. A permit would be required under Rule 401.

605 Violation of Water Quality standards [P-305; 0-605(a)]

Rule 605 incorporates the water quality standards contained in Parts II and III of Chapter 3 into Chapter 4. This is the same as Rule 605(a) of the present Chapter 4 and is similar to Rule 402 of Chapter 3.

The second sentence of Rule 605 provides that the Agency shall take appropriate action under Section 31 or 39 of the Act. This is redundant because under the remainder of Chapter 4 the Agency must take such action. However, certain operators have recently contended before the Board that incorporation of water quality related effluent standards is not authorized by Board regulations. The second sentence is to make it clear that water quality related effluent standards can be incorporated into permit conditions (R. 17).

605.1 Temporary Exemption from Rule 605

This rule will allow the Agency to issue permits through July 1, 1981 to authorize discharges which violate Rule 605 by causing water quality violations of TDS, chloride, sulfate, iron and manganese. For the remainder of the discussion of this rule only, these will sometimes be referred to collectively as TDS. An operator desiring such exemption may apply for a new state or NPDES permit containing the exemption. Rule 605.1(c) sets a special standard for permit issuance different from that contained in Rule 502. The burden will be on the Agency to demonstrate significant adverse effect on the environment in and around the receiving water in order to deny the permit. The operator, however, will have to submit adequate proof that the discharge will not adversely affect any public water supply. In order to qualify for the exemption the operator will have to adopt "good mining practices," housekeeping measures designed to minimize TDS discharges.

Rule 605.1 was first proposed on November 21, 1978 by the Institute. This was after merit hearings on the proposal were concluded. On December 14, 1978 the Board ordered the record in this case held open to take evidence on Rule 605.1. Merit hearings on the proposal were held at the same time as the economic impact hearings. This proposal has generated the bulk of the controversy in this proceeding.

Mine discharges are often high in TDS. Much of this comes from water pumped from mine areas or runoff from spoil banks. A substantial number of mines in the state produce mine discharges which cause water quality violations in the receiving streams. Coal mines can seldom be located adjacent to large rivers, but rather must be located where coal deposits are located. Their discharges are frequently into intermittent streams so that the discharge comprises the bulk of the flow of the stream. Therefore the discharge is limited, not by the effluent standards of Rule 606, but by the more stringent water quality standards referenced in from Chapter 3 (R. 129, 142, 151; E. 6, 11).

In a related proceeding, R76-7 the Coal Association sought to exempt coal mines from application of Rule 605 with respect to TDS. Entry of a Final Order in that proceeding has been stayed pending final resolution of this proceeding.

Presently relief from Rule 605 is available only through the variance procedure. At the hearings, the Coal Association stated that a variance application can cost as much as \$10,000 (E. 126). There was discussion at the hearings of a class action variance. However, this was rejected (E. 19, 80).

Under the auspices of the Institute a joint Agency/industry group called the Mine Related Pollution Task Force has been formed. The Task Force is conducting a study to propose an eventual permanent replacement for Rule 605. It expects to present this proposal before July 1, 1981 (E. 106).

A large amount of earth must be disturbed during the process of coal mining. Some of the TDS in the discharge results from direct leaching of soluble minerals from the rock by groundwater or rainwater falling on spoil banks. This is the source of chlorides, which is not generally the main problem in Illinois. Much of the problem in Illinois is sulfates. These are formed when air or dissolved oxygen comes into contact with sulfur-containing minerals which have been disturbed. Sulfuric acid is formed, producing acid mine drainage. Neutralization of that discharge to meet the pH requirements of Rule 606 may further increase the TDS concentration of the discharge.

The Economic Impact Study in R76-7 has been incorporated into this proceeding by reference (E. 103; Economic Impact of Dissolved Solids Regulation upon the Coal Mining Industry, Institute Document No. 77/28). Although there is treatment available to reduce the iron and manganese levels, treatment to reduce the soluble components of TDS is not economically available. Available

technology includes reverse osmosis and distillation. These are energy intensive and very expensive on a scale that would be required to meet most mine discharges. The Economic Impact Study in R76-7 concluded that for the mines in the state to meet the present TDS water quality standard would involve a capital investment of \$138.4 million and annual operating costs of \$37.4 million (E. 69).

The Task Force has promulgated, as an interim measure, a code of good mining practices. The approach taken is not end-of-the-pipe treatment of the discharge, but rather a series of housekeeping measures which are likely to reduce the TDS concentration resulting from mining activities. These are summarized on page 4 of Exhibit 4. These involve practices which may minimize water from coming in contact with disturbed areas, including bypass diversions, slope and gradient reduction, stabilization, sealing of bore holes, introduction of mine barriers, special steps for disposal of potential contaminant producing materials and fracture zone sealing. There are also measures involving retention and control of waters exposed to disturbed materials, including erosion and sedimentation controls, reuse of discharges and minimization of exposure of water to disturbed materials. Other methods include a rerouting of discharges to larger streams where the dilution would be provided, augmentation of flow of receiving streams to provide dilution and controlled release of effluents during times of high flow when there is ample dilution.

Many of these practices are novel and reliable cost estimates are not available. Therefore it is not possible at this time to do an actual economic impact study evaluating the cost of requiring the code of good operating practices. However, the Board incorporates the Economic Impact Study in R76-7 as an economic impact study on Rule 605.1. Although that study does not address the code of good operating practices, it does conclude that enforcement of the present standard by requiring end-of-the-pipe treatment would be very expensive. There is expert testimony in the record to substantiate that, although the costs of good operating practices are unknown, they will be substantially less than the cost of end-of-the pipe treatment (E. 146).

The eventual rule may include some combination of these good housekeeping procedures together with the proposal to increase the water quality standard for TDS in intermittent streams receiving coal drainage (E. 73, 110, 128).

The Board notes that none of the parties in these proceedings has addressed the dilution rule (Rule 604). Part of the rationale of the rule against dilution of effluents goes to accumulation of toxic pollutants. Chlorides and sulfates are generally soluble and should not accumulate under ordinary circumstances. Furthermore, they are not at all toxic below a certain concentration. Therefore, the Board suggests the Task Force consider amending Rule 604 to allow dilution of effluents by permit where good housekeeping practices cannot reduce the TDS levels to an acceptable level. However, dilution of effluents should not be permitted where groundwater must be used for the dilution or where there is available only surface water which has more valuable uses.

Concern was expressed at the hearing that the Board was being asked to adopt a rule requiring compliance with a code of good operating practices which had not yet been promulgated (E. 111, 134). Subsequent to the economic impact hearings, the code was completed and submitted to the Board. Further concern was expressed that the record was deficient in that there was no technical testimony to the effect that compliance with the code of good operating practices would in fact reduce water pollution (E. 17, 80, 144). Control of mining practices which are not related to the Board's statutory jurisdiction would, of course, be beyond the Board's authority. Further consideration of this problem led to the recognition that the proposed version of Rule 605.1 required compliance with the code and that this was an unauthorized delegation of rulemaking authority to the Agency. The proposal has therefore been rewritten to provide that the Agency issue the exemption if the operator submits proof that he is utilizing good mining practices designed to minimize discharge of TDS. The Agency is authorized to promulgate the code of good mining practices. Compliance with the code will be deemed evidence that the operator is utilizing good mining practices. However, should the Agency deny the exemption due to non-compliance with the code, the operator will be free on permit appeal to argue that his practices, though not conforming to the code, are designed to minimize the discharge of TDS. With this construction, the Board is not requiring compliance with the code and therefore technical evidence to substantiate the code is not required. If provisions of the code are not reasonably related to prevention of water pollution, this will be an issue before the Board upon permit appeal.

Rule 605.1(b) has been added to the Agency proposal. This provides specifically that the permittee requesting exemption must file a permit application. The Agency indicated at the hearing that this was the case and it has been added to the proposal for clarity (E. 26, 121).

The Agency proposal was vague on the question of the burden of proving adverse effect on the environment. At the hearing the parties agreed that the Agency should have the burden of demonstrating adverse effects. This is at variance with the usual burden of proof in permit issuance. Section 39 of the Act provides that it shall be the duty of the Agency to issue such a permit "upon proof . . . that the facility . . . will not cause a violation of this Act or regulations hereunder." The Board in this situation is by regulation reversing the burden of proof (E. 16, 30, 34, 37, 79, 81, 112, 118).

At the hearings there was a discussion of whether the intent of the proposal was that the Agency fix an interim limitation on the TDS. The conclusion was that under the proposal the Agency could not set such an interim limit. If the Agency can demonstrate significant adverse effect on the environment, then it must deny the exemption. In this case the applicant will have to proceed by way of the variance route (E. 74, 78).

The original proposal specified "significant adverse effects on aquatic life or existing recreational areas of the receiving streams." This has been changed to "effect on environment in and around the receiving water." The exemption should be denied if there is significant adverse effect to riparian areas and in general to the environment in and around the receiving water (E. 115).

606 Effluent Standards (P-306; 0-606)

Rule 606 sets effluent standards for mine discharges. Rule 606(a) has been added to the Agency proposal. This makes it clear that the effluent limitations contained in Part IV of Chapter 3 do not apply to mine discharges. This has always been the law. However, it is not clearly set forth in the proposal or the old Chapter 4 (E. 56).

Compliance with the effluent standards other than acidity and pH is determined by the averaging rule contained in Rule 601. Compliance is based on a thirty day average with no 24-hour composite exceeding two times the standard and no grab sample exceeding five times the standard.

New Storet numbers have been specified for acidity, ammonia nitrogen, zinc and fluoride. The old Rule 606 regulated nitrogen at 5 mg/l whereas the new rule specifies ammonia nitrogen, measured as N.

The standards for zinc, lead and acidity are unchanged except for the Storet number. The pH range has been tightened from five to ten to six to nine (E. 45, 51). The EcIS concluded that this would benefit the environment (EcIS 27; E. 52). The cost will be minimal since only one additional mine will be out of compliance with the new standard (EcIS 6, 39).

The standard for iron has been decreased from 7 to 3.5 mg/l and the standard for total suspended solids (TSS) has been tightened from 50 to 35 mg/l (R. 46, 51, 53). These changes are environmentally beneficial (EcIS 25, 31; E. 51, 53). Under the averaging rule, these standards must be met on a thirty day average. They are doubled when measured on a daily composite. The new numbers are the same as federal guidelines applicable to coal mines under 40 CFR 434. A recent permit appeal to the Board revealed that there is some dispute as to whether the federal or the existing Chapter 4 standards are more stringent (Peabody Coal Co. v. EPA; PCB 78-296, September 20, 1979). This is because the federal standard, when coupled with the averaging rule and precipitation exception, sometimes yields a higher number on a 24-hour composite. However, the Board concludes that it is more difficult to meet the lower thirty day average than what the discharger must now meet and that this is a more stringent standard (EcIS 25). The economic impact will be minimal since most mines subject to the rule must meet the federal guidelines anyway (EcIS 42).

Footnote 3 provides an exception for flows resulting from a 10-year, 24-hour precipitation event. This exception applies only to a facility designed, constructed and maintained to contain or treat discharge from less than a 10-year, 24-hour precip-

itation event, but designed to bypass a larger precipitation event. This exception is taken from the federal standards of 40 CFR 434. Federal mine safety regulations mandate that holding ponds be designed to bypass such rainfall for safety reasons. This exception has been added in order to bring the effluent standards into line with these other regulations (E. 47, 56, 124).

The original Agency proposal was unclear as to which parameters were subject to the exception in footnote 3. During discussion of the EcIS it became clear that the Agency's intent was that the 10-year, 24-hour footnote apply to all parameters except pH and acidity (E. 124). The federal guidelines apparently except pH and acidity also. pH and acidity are not exempt under this version of Rule 606. However, one would not expect to see excursions with respect to these parameters during overflows caused by a large rainfall. The large rainfall should not result in increased production of acid in disturbed materials. A large flux of water has some buffer capacity and should dilute the acidity so as to moderate pH.

The Economic Impact Study found that it would cost \$40,000 to \$90,000 per mine to construct holding basins to contain a 10-year, 24-hour storm (EcIS 42; E. 56, 124). However, this conclusion may be affected by confusion in the proposal concerning the extent of footnote 3 to Rule 606. It has been argued by the industry that the old Chapter 4 required construction of indefinitely large holding basins and that 10-year/24-hour basins therefore represent a cost savings over the present requirements of Chapter 4 (Peabody Coal Co. v. EPA, op. cit.)

The fluoride standard has been increased from 8 mg/l to 15 mg/l. In the hearings evidence was presented to substantiate this relaxation of the standard. The old standard was based on experiments which were done in deionized water containing fluoride. In water containing other ions of hardness equivalent to typical Illinois mine drainage water, the fluoride is not nearly so toxic to aquatic life as had been previously believed (R. 117; E. 52).

607 Offensive Discharges [P-307; 0-605(b)]

Rule 607 proscribes drainage containing settleable solids, floating debris, visible oil, grease, scum or sludge solids. Color, odor and turbidity should be reduced below obvious levels. This is Rule 605(b) of the present Chapter 4 and Rule 403 of Chapter 3 (R. 47, 51).

608 Deleted (P-308)

The Agency proposal contained a rule to the effect that an operator shall conduct mining activities so as not to violate the Act and Chapter 4. This has been deleted. A number of substantive rules are set forth in Chapter 4 and the Act. It is unnecessary to make a rule against violating the other rules. Furthermore, a charge in a complaint that an operator had violated this rule could be a violation of due process in that it would not adequately inform him of what he had done.

PART VII: COMPLIANCE AND EFFECTIVE DATES

Part VII contains transitional rules covering situations which will arise after the effective date of Chapter 4. Rule 701 provides that the Chapter will become effective ten days after filing with the Secretary of State. Rule 703 provides that the state permit requirement of Rule 401 becomes effective only on expiration of outstanding permits. Outstanding permits will expire no later than three years after the effective date or upon the first expiration of an NPDES permit held for the facility.

Rule 702 provides that a person holding an outstanding permit may make application for a new permit either before or after the effective date of this Chapter. It is anticipated that operators of coal transfer and storage facilities will want new permits. After the effective date the Agency may require a new permit application on 180 days notice. Rule 703(d) provides for expiration of the outstanding permit if the application is not made by this date. Rule 703(c) provides for expiration upon issuance of a new state or NPDES permit for the facility. If the Agency denies the new permit or takes no action, the outstanding permit will remain effective for up to three years as provided by Rule 703(a).

The NPDES permit requirement of Rule 302 is the same as that found in Rule 901 of Chapter 3. There is no need to stay enforcement of that rule since this revision does not impose an NPDES permit requirement on any additional facilities.

The provisions of Chapter 4, other than Rule 401: State Permits, are effective ten days after filing. At this time the other rules of Chapter 4 become immediately effective. This includes all of Part VI, including the new effluent standards of Rule 606. Holders of outstanding operating permits may be subject to enforcement actions based on Rule 606 as provided by Rule 410 even if their discharges conform with their old permit conditions.

Rule 704 provides the requirement of old Rule 502 of an abandonment permit continues to apply to operators who have opened mines prior to the effective date. This will continue indefinitely until the operator is issued for the facility a state or NPDES permit which contains an abandonment plan. Such a permit may be issued under the procedures of Rule 702 and 703.

This Opinion, together with the Board Order of December 13, 1979, constitute the Proposed Opinion and Order of the Board in this proceeding.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Proposed Opinion was adopted on the 24th day of January, 1980 by a vote of 4-0.



Christan L. Moffett Clerk
Illinois Pollution Control Board