

ILLINOIS POLLUTION CONTROL BOARD  
December 23, 1981

IN THE MATTER OF: )  
 )  
ALTERNATIVE CONTROL STRATEGIES, ) R81-20  
INTERIM RULE, ) INTERIM RULE  
CHAPTER 2: AIR POLLUTION. )

Proposed Rule. First Notice.

OPINION AND ORDER OF THE BOARD (by I. Goodman):

This rulemaking is undertaken pursuant to Section 9.3(b) of the Environmental Protection Act (the Act), as amended by P.A. No. 82-0540 on September 16, 1981. P.A. No. 82-0540, known as the "Bubble Bill" or HB 1354, was designed to enable owners and operators of air pollution emission sources, either individually or collectively, to utilize the most economically advantageous mixture of control strategies to achieve environmental goals. This usually involves overcontrolling at one emission source and undercontrolling at another. The statute provides that the mixture of control strategies used in an "alternative control strategy" (ACS) permit must provide equivalent protection for the environment. The basic concept is that an ACS should have no negative impact on the environment and should be economically beneficial to owners and operators. To insure that the unique issues involved in ACS permits are adequately addressed, Section 9.3 authorizes the Board to promulgate standards for issuance of permits and a permitting program for sources utilizing alternative control strategies.

Section 9.3(b) authorizes the issuance of "interim regulations" within 120 days after the effective date of P.A. No. 82-0540 through an expedited rulemaking process which bypasses Title VII requirements of the Act. The purpose of this expedited proceeding is to provide regulatory guidance which will enable owners and operators to begin to plan and implement ACS to meet imminent compliance deadlines. Section 9.3(c) mandates that the Board promulgate final regulations establishing an ACS permit program no later than December 31, 1982. The record in this proceeding will be consolidated with the final rulemaking to avoid unnecessary duplication. In addition, the final rulemaking will consider the economic impacts of these regulations pursuant to Title VII of the Act. Once effective, the final regulations will supersede the interim rules.

The Board initiated public comment on the interim rules by circulating a "public draft" proposal and inviting comments and alternative proposals. The Illinois State Chamber of Commerce filed an alternative proposal which was consolidated for review with the Board's initial proposal under Docket No. R81-20 on September 16, 1981. The Illinois Environmental Protection Agency (IEPA) offered another alternative proposal on October 9, 1981. These three proposals were labeled Exhibits 1, 2, and 3, respectively, in the record of the proceeding. (Additional amendatory language was proposed and entered into the record in the course of the proceeding.) Hearings were held on R81-20 on October 15, 16, and 19, 1981 to consider the merits of all proposals before the Board. The attached proposal contains elements of each of the proposals before the Board and also reflects the public comment and testimony received.

### Overview

Basically, these regulations establish a permitting program. They describe the standards for Agency issuance of an ACS permit, as well as the information which must be contained in an ACS permit application to enable the Agency to make its determination. Due to the nature of ACS, several aspects of the ACS permit program differ from the standard permitting requirements contained in Part I of Chapter 2. For example, an ACS application must provide a demonstration of "equivalence" to other existing requirements with regard to emissions, environmental quality, and methods of compliance. In addition, each ACS emission source must comply with unique limitations contained in its permit. These limitations are predicated on the compliance of all other emission sources in the ACS. Thus, specialized provisions are necessary for recordkeeping and reporting, revision, renewal, and describing the responsibilities and liabilities of participants in multi-person ACS.

Because ACS permits are new and potentially more complex than other Chapter 2 permits, the Board anticipates that extensive communication between the permit applicant and the Agency will occur prior to issuance of an ACS permit. The regulations have been drafted to provide the flexibility necessary to tailor ACS permits to the variety of strategies which may be proposed. The application information, the recordkeeping and reporting, and the monitoring and testing provisions provide that the Agency may request any reasonable additional information which may be needed to make a determination and insure compliance under a particular ACS configuration. For example, an ACS proposals may include non-traditional emission sources, such as fugitive emission sources, or mobile sources. Although these sources present special problems and will undoubtedly require extensive documentation and safeguards to insure equivalency and compliance, it is unnecessary to address these special problems in the Board regulations. The Agency can review such applications on a case-by-case basis within the context of these regulations.

### Definitions

Chapter 2 definitions are made applicable to this Part. (The Board notes that definitions are contained in both Parts I and II of Chapter 2.) In particular, the definition of "emission source" (Rule 101), i.e., "any equipment or facility of a type capable of emitting specified air contaminants to the atmosphere," is important in the ACS context because trades under an ACS would focus on each "emission source" rather than an entire plant or "source." It should also be noted that the definition of "person" (Rule 101) includes any "agency, political subdivision of this State, any other state or political subdivision or agency thereof," Thus, governmental bodies, as "owners or operators," may participate in an ACS.

Several new definitions are made applicable to this Part only. Notably, "Actual Emissions," "Allowable Emissions," "Emission Baseline," "Potential to Emit," and "Alternative Control Strategy (ACS)" are essential terms in an ACS context. Some of these definitions may also be determined to apply to Part XI: Major Source Review Programs in the course of the final rulemaking on R81-16. If so, a change in placement of the definitions may be appropriate at the time that regulation is promulgated. Definitions of "Major Stationary Source" and "Stationary Source" were proposed to be included in the ACS rules by Illinois EPA. However, because ACS focus on "emission sources," the Board believes these definitions are largely irrelevant to this rulemaking and that it would be better to focus on them in R81-16.

### Standards of Issuance

Each of the four standards in Section 212.120 must be met for issuance of an ACS permit. Sections 212.120(a) and (b) reflect the statutory constraints contained in Section 39.1(a) of the Act. Section 212.120(c) requires that methods for determining compliance must be equivalent to those associated with otherwise applicable requirements. This requirement is necessary to insure the environmental equivalence mandated by the Act. Section 212.120(d) states that certain regulations cannot be superseded by an alternative strategy. These are: New Source Performance Standards (Part IX), National Emission Standards for Hazardous Air Pollutants (Part X), and the Major Source Permit Programs (Part XI)\*. The constraint with regard to new sources is required by Federal case law. (See ASARCO, Inc. v. EPA, 11 ERC 1129 (D.C. Cir. 1978).)

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\*The proposed Major Source Permit Program regulations are the subject of Docket No. R81-16. A rule adopting the interim Non-attainment Area portion of these rules (Interim Rule R81-16) was adopted on December 17, 1981. The final rule (R81-16), which will cover both Non-attainment and Attainment areas is awaiting an Economic Impact Study.

### Application Information

In addition to specific information with regard to each emission source, the application must contain an analysis of emissions, environmental quality, and methods of assuring compliance. This analysis will provide the basis for the Agency determination of compliance with the standards of issuance and the overall equivalence of the ACS with other regulatory and statutory requirements. In each analysis (Sections 212.111, 212.112, and 212.113) the applicant must compare the ACS with a "base case," i.e., the emissions, impacts, or methods which would exist or be allowed under existing regulations.

Basically, the analysis of emissions should compare ACS emissions to the "baseline emissions," for each source involved in an ACS. In addition, to insure that emission reductions relied on for other purposes are not "double-counted" and that other unanticipated effects will not accompany the ACS, the analysis must also describe emission increases from emission sources outside the ACS which may accompany or affect the proposed ACS.

The environmental quality analysis must address air quality impacts, risk to the public health and welfare, and other environmental impacts associated with the proposed ACS. The scope of this analysis is mandated by the language of P.A. 82-0540 which requires that ACS provide "equivalent protection of the environment." The effect of ACS emissions on environment must be equivalent to that of emissions which would otherwise occur or be allowed to occur.

### Modeling Exemption

One component of the environmental quality analysis required of an ACS permit applicant under these regulations is a comparison of air quality under existing regulations and under the ACS. Generally, dispersion modeling is required to predict the impact of the ACS. However, because modeling is expensive and may not be necessary to insure air quality in some situations, Section 212.112(a) provides that the Agency may exempt an emission source from the general modeling requirement if one of three specified demonstrations are made.

First, Section 212.112(a)(1) provides that if the pollutant which is the subject of the ACS is not susceptible to modeling or if, due to its nature, modeling will not identify its air quality impacts, the Agency may dispense with the modeling requirement. This, for example, may apply to VOC or NO<sub>x</sub> ACS where modeling is often considered to produce ambiguous results.

Second, Section 212.112(a)(2) provides an exemption from modeling requirements for sources located in close proximity to one another. The rationale for this exemption is that the accepted modeling techniques do not distinguish the impact of an ACS trade

made between such sources as long as plume heights remained relatively the same. (Local impacts are primarily a function of plume heights, while long distance impacts are primarily a function of the distance between emission sources.) Although there is discussion in the record of various other distances (R. 129-140), the Board is persuaded by the logic supporting a 250 meter exemption. The 250 meter distance represents the greatest distance that could occur between the location of the actual maximum impact and the nearest modeled receptor if a receptor grid with 500 meter spacing is utilized. This is the grid spacing generally accepted by USEPA for modeling. Thus, it should be consistent with modeling demonstrations made in the SIP and should provide equivalent protection of air quality.

It is anticipated that sources qualifying under the 250 meter exemption will be considered to fall within the USEPA "Generic Bubble" guidelines. USEPA has indicated that it will not require individual SIP review of ACS permits which fall within the "Generic Bubble" guidelines. (See 46 FR 20552, April 6, 1981 (Exhibit #10).) Included in those guidelines is a modeling exemption for emission sources located within a specified distance from one another (100 to 250 meters). The Board has provided the 250 meter exemption as well as the alternative exemption discussed below. It is anticipated that both should meet USEPA "generic bubble" guidelines.

Section 212.112(a)(3) contains an alternative exemption from the modeling requirement which allows a permit applicant to demonstrate that the differences in location, plume height, etc. are not likely to significantly affect ambient air quality. This option will enable applicants owning emission sources which are greater than 250 meters apart to demonstrate that modeling is unnecessary for their particular ACS. A permittee may need to perform limited modeling or monitoring to demonstrate that significance levels will not be exceeded. Because this exemption references the actual concern, i.e., the impact of the ACS on air quality, it need not specify distances between emission sources. This provision provides needed flexibility in light of the fact that a question exists within USEPA itself as to the appropriate distance between sources and the fact that testimony from modelers in the record of this proceeding revealed that in certain situations distances between sources cannot be correlated to air quality impacts. It is anticipated that emission sources qualifying under this exemption will fall within current "Generic Bubble" guidelines and may be exempt from individual SIP review.

Impacts that are to be considered "significant" are established in Section 212.112(a)(3). These levels are taken from the USEPA Emission Offset Interpretive Ruling, Appendix S to 40 CFR 51.18(k). IEPA indicated in the record that these are the significance levels they would refer to in determining whether modeling is necessary (R. 286. Also see Exhibit #17). To provide an enforceable standard for all parties, these levels are included in the Board rules.

USEPA drafts required that all emission points included in the ACS be within a specified distance from one another to take advantage of the "close proximity" exemption. However, the justification for this position is unclear in light of the fact that the focus of both the required modeling and the exemption is on the "emission sources" involved in a particular trade, rather than the entire ACS. (See the definition of "Emission Source," Rule 101, Chapter 2.) For example, under a given ACS sources A and B may increase emissions on the condition that source C reduces emissions to the extent necessary to offset both increases. Since the emission "trades" are between "A and C" and "B and C," any change in air quality is a function of those trades. The distance between sources which are not "trading" emission increases and decreases is irrelevant if the effect of each trade within the ACS is adequately considered.

On a related point, Illinois EPA's proposal would require dispersion modeling only for "major sources." Although the fact that a source is a major source is critical in the Major Source Review Program context (R81-16), it should not affect an ACS. This is because an ACS is based on trades between individual "emission sources" rather than entire "sources," as noted above. The correct focus in these rules is on the amount of emissions and location of the individual emission source.

#### Baseline

The establishment of the proper emission baseline for the crediting of emission increases and reductions under an ACS was hotly debated in this proceeding. The Board's initial proposal (Exhibit 1) tracked the language of USEPA Region V's "Generic Bubble Rule" and, among other things, related the baseline determination to the data base relied on in the SIP. The initial Illinois State Chamber of Commerce proposals (Exhibits 2 and 2(a)) proposed that existing Board emission limitations or "allowable" emissions be used as the baseline for ACS determinations. The Illinois EPA (Exhibit 3) proposed that the lesser of the actual or allowable emissions be used. The second amended ISCC proposal (Exhibit 2(b)) largely adopted the approach recommended by the IEPA; however, it proposed that the definition of actual emissions "reflect those emission levels existing prior to reductions beyond the requirements of Board regulations which resulted from the installation of pollution control equipment changes in process procedures, materials or shutdowns." To resolve this issue, it is necessary to review the purposes of P.A. 82-0540 and the underlying assumptions of the air pollution control program.

The legislative intent of P.A. No. 82-0540 is stated in the findings of the General Assembly in Section 9.3(a). That section indicates an intent to authorize alternative control strategies which are "environmentally equivalent to [strategies] required by Board regulations or the terms of this Act" and "assure equivalent protection of the environment." (Section 9.3(a)).

Although Section 9.3(d) indicates that the Board may not impose requirements which are more stringent than those required for compliance with the Clean Air Act, the Act, or other Board regulations, the Board must insure that ACS are environmentally equivalent to all otherwise applicable Board regulations, not simply the Part II emission limitations.

Rule 102 of Chapter 2 establishes the limitation that "No person shall cause or threaten or allow the discharge or emission of any contaminant into the environment in any state so as either alone or in combination with contaminants from other sources, . . . to prevent the attainment or maintenance of any applicable air quality standard." Thus, the emission baseline utilized in an ACS must be established such that attainment and maintenance of the air quality standards will not be jeopardized by emission increases projected under the ACS. Although this does not mean the emission baseline used must always be "actual emissions," it does require, as a minimum, that no emission reductions be credited under an ACS which have been used as the basis for predicting achievement of the air quality standards in Illinois.

The State Implementation Plan (SIP) is the "blueprint" utilized by the State to "define the process by which air pollution goals will be achieved." (Illinois SIP, Executive Summary, p. 1.) Thus, the data used as the basis for air quality projections in the SIP provides the appropriate baseline for crediting increases and decreases under an ACS. To predict achievement and maintenance of the air quality standards in the compliance year, the SIP relied upon modeling which utilized the lesser of actual or allowable emissions for emission sources. (See SIP Volume 2, pp. 721; SIP Volume 3, pp. 813; and R. 198.) Thus, to assure the environmental equivalence of ACS emissions, it is necessary, as a general rule, to utilize the lesser of actual or allowable emissions as the baseline for determining creditable increases and decreases.

This conclusion is dictated by the structure of the entire air pollution control program. Testimony in the record also indicated that if owners of emission sources for which actual emissions were utilized in the SIP demonstration were permitted to calculate decreases in emissions from the maximum allowable emissions limit set by Board rules, actual emissions would increase and that, as a result, several areas of the state which are currently attainment areas or unclassified areas would become non-attainment areas (R. 201). As was also pointed out by commentators, the Illinois emission limitations were promulgated as an upper limit on the assumption that many, in fact most, emission sources were emitting under the maximum allowable. The general use of the allowable emissions as a baseline for ACS might require the re-evaluation and possible modification of the Board's Part II emission limitations.

Furthermore, it is probable that pollution would increase if allowable emissions were used as the baseline because increments of emission reductions take on an economic value under an ACS.

Under a banking system, even emission sources which are not involved in an ACS could "bank" credit for an artificial emission reduction equal to the currently unutilized emission increment or the difference between their actual and allowable emissions. Thus, use of an allowable emissions baseline would create an economic incentive for sources to utilize or "bank" currently unutilized emission increments up to the maximum allowable emissions. An actual increase in pollution is inevitable under these circumstances. Such an increase would be contrary to the "environmental equivalence" intended by P.A. No. 820540 and the basic concept that ACS should not negatively affect the environment.

Several witnesses in this proceeding expressed concern that businesses which are currently operating below their normal production capacity would be penalized by use of an actual emission baseline which reflected current conditions. To insure that this does not occur, the definition of actual emissions has been drafted to require the Agency to utilize a more representative time period upon finding that data from the preceding two years does not represent normal source operation. The burden of demonstrating that another time period is more representative is on the permit applicant.

On a related point, ACS permits should retain the same degree of flexibility as a regular permit. The use of actual emissions as a baseline should not be construed as a new limitation on hours of operation or production levels. For example, an applicant may propose that emissions be calculated as a function of units of production or process weight (R. 203-205). "Process standards" such as these are currently used in Chapter 2, e.g. Rule 203. The calculations made from the baseline do not create any new prohibitions on activities which are otherwise allowable under existing permits. The only new requirement is that reductions and corresponding modifications which have been committed to "offset" increases be maintained. This type of commitment is not a regulatory requirement, but rather arises as a contractual relationship between persons utilizing an ACS.

Notwithstanding the general baseline rule, there is an inequity created by disallowing emission reduction credits for reductions achieved by virtue of pollution controls implemented at a time or in a situation where ACS were not available. Although it is impossible to resolve all inequities, Section 212.105(b) limits this inequity to the extent possible consistent with the mandate of "environmental equivalence." Section 212.105(b) creates an exception allowing emission reductions to be credited under an ACS to the extent that 1) they were achieved as a result of actions taken to reduce emissions, 2) they reduced emissions below required levels, and 3) they were not relied upon by the Agency in the compliance year demonstration under the SIP. Such emission reductions are creditable only "to the extent" that they meet the stated conditions. Thus, that portion of a reduction which is attributable to other factors or was predicted and relied



upon in the SIP is not creditable. Where applicable this authorizes a case by case determination of the appropriate emission baseline and does not necessarily mean that the baseline will be the "allowable" level.

These three conditions, taken together, provide an equitable approach to crediting emission reductions which were achieved as a result of good faith actions taken to reduce emissions beyond what is normally required. At the same time, the condition that an emission reduction cannot have been relied on in the SIP demonstration insures that the crediting of these reductions will not interfere with the State's achievement of air quality goals. By crediting emission reductions whenever these conditions have been met, this provision should encourage owners of emission sources to reduce emissions as quickly as they are technologically capable of doing so. The Board notes that the encouragement of technological innovation is one of the stated purposes of P.A. #82-0540.

This subsection may allow certain previously banked emissions to be credited. It also provides a potential framework for crediting emission reductions which cannot be used in an ACS immediately. Although a complete "banking" system is beyond the scope of this interim rule, this initial framework may provide a basis for consideration of a "banking" system in the final rule in R81-20.

#### Compliance Dates

Section 212.130(a) provides that sources utilizing an Alternative Control Strategy generally must meet the same compliance deadlines which are otherwise required by Chapter 2. The term "as expeditiously as practicable" is intended to indicate that sources which can achieve compliance before the stated deadline are required to do so.

Section 212.130(b) provides an exception to the general rule for sources which are subject to Rule 205 of Chapter 2 (VOC emissions). This exception is consistent with Section 172 of the Clean Air Act, as amended in 1977, which allows states to extend the compliance date for attainment of the ozone standard until December 31, 1987. The record in this proceeding is replete with testimony to the effect that many sources which would otherwise be eligible to utilize an alternative control strategy will be precluded from doing so in the absence of such an extension due to the complexity of preparing and setting up an Alternative Control Strategy before the currently applicable December 31, 1982 compliance deadline. (See R. 29-30, 40, 49-53, 59-60, 87.) If precluded from utilizing an ACS, many of these sources will be forced to purchase more expensive controls to achieve the same emission reductions. Such a result would be contrary to the intent of P.A. No. 82-0540, and would result in injury to the Illinois economy without yielding significant environmental benefits.

Although the extension of the compliance deadlines could be achieved by a number of individual variance proceedings brought before the Board pursuant to Title IX of the Act, the variance mechanism is unworkable in this case because it would entail the lengthy federal SIP approval process. This approval process could extend beyond the 1982 deadline and, thus, would prevent many sources from utilizing an ACS. During this approval period, sources proposing ACS would have no assurance they could legally implement the strategy consistent with federal law. Once "generic" ACS rules are federally approved, SIP approval of individual ACS which are of a "generic" nature is not required. Thus, emission sources which fall within the "Generic" guidelines and Section 212.130(b) can avoid the SIP process and can begin implementing the ACS upon issuance of the permit.

It should be noted that Section 212.130(b) is intended to provide a narrow exception to the general rule. The Board has tailored standards for the issuance of ACS permits containing alternative compliance plans to insure that this exception is no broader than absolutely necessary. To fall within this limited exception, the compliance plan must be contained in an Agency-approved permit and be subject to the Agency's public participation procedures. To approve such a plan, the Agency must find that an extension is genuinely necessary, environmentally beneficial, and consistent with the Clean Air Act.

In determining the necessity for extending the compliance deadline, the Board anticipates that the Agency will consider factors such as the complexity of the proposed ACS, the time required for equipment purchase and installation, and the good faith efforts of the permittees to implement the ACS as quickly as possible. In addition, the Agency must find that the ACS will result in a net benefit to the environment, either in terms of faster or greater emission reductions than would otherwise be achieved. This is justified by the fact that when compliance with existing compliance deadlines is delayed, more pollution is added to the environment over time than would otherwise be the case. In addition, this requirement, like the "necessity" requirement, is designed to insure that the ACS permit provisions do not become a route for avoiding existing compliance dates. Finally, the requirement of "consistency with the Clean Air Act" requires the Agency to find, among other things, that reasonable further progress "toward attainment of the ambient air quality standard" is not jeopardized.

#### "Generic Bubble" Determination

These rules, once finalized, will be reviewed by USEPA for compliance with the federal "Generic Bubble" policy. As stated above, the "Generic Bubble" policy defines a type of relatively simple ACS which USEPA has determined will not require individual SIP revisions. Although several provisions of these rules go

beyond the current approved USEPA policy, it is the function of these rules, as a whole, to provide a framework for all ACS, not just simple "Generic Bubbles." Rather than attempting to anticipate USEPA, the Board will submit the rule as a whole and allow USEPA to designate those portions which meet their requirements for Generic Rules. Proposals falling within those designated provisions will not require individual SIP revisions.

#### ORDER

It is the Order of the Illinois Pollution Control Board that the following proposal to amend Chapter 2: Air Pollution Regulations by the addition of Part 212: Alternative Control Strategies be published for First Notice pursuant to Section 5.01(a) of Illinois Administrative Procedure Act.

TITLE 35: ENVIRONMENTAL PROTECTION  
 SUBTITLE B: AIR POLLUTION  
 CHAPTER I: POLLUTION CONTROL BOARD  
 PART 212: ALTERNATIVE CONTROL STRATEGIES

SUBPART A: ALTERNATIVE CONTROL STRATEGIES INVOLVING ONE PERSON

Section 212.101 Definitions

Unless a different meaning of a term is clear from its context, the definitions of terms used for this Part shall be the same as those used in the Pollution Control Board Rules and Regulations, Chapter 2: Air Pollution.

Actual Emissions: The actual rate of annual emissions of a pollutant from an operational emission source for a particular date equal to the mean rate at which the emission source actually emitted the pollutant during the two-year period which immediately precedes the particular date and which is determined by the Agency to be representative of normal source operation; however:

- a) The Agency shall allow the use of a different time period upon a determination that it is more representative of normal emission source operation. The burden shall be on the applicant to demonstrate that another time period is more representative. Actual emissions shall be calculated using the emission source's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
- b) If the Agency determines that there is inadequate information to determine actual emissions as indicated in the preceding paragraphs, the Agency shall use the allowable emissions of the emission source.

- c) For any emission source which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the emission source on that day.

Allowable Emissions:

- a) The emissions rate of an emission source calculated using the maximum rated capacity of the emission source (unless the source is subject to permit conditions or other enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:
- 1) the applicable emission standard or limitation contained in this Chapter, including those with a future compliance date; or
  - 2) the emissions rate specified as a permit condition including those with a future compliance date.
- b) The allowable emissions may be expressed as a permit condition limiting annual emissions or material or fuel throughout.
- c) Allowable emissions shall include a reasonable estimate of emissions in excess of applicable standards during start-up, malfunction, or breakdown, as appropriate.
- d) If an emission source is not subject to an emission standard under provision (a) and is not conditioned pursuant to provision (b), the allowable emissions shall be the potential emissions of the source.

Alternative Control Strategy (ACS): A specific program of emissions limitations and requirements which is environmentally equivalent to that which would otherwise be required by applicable statutes or regulations, and under which the owner or operator of an emission source increases emissions of a regulated pollutant beyond the emission baseline at one or more emission sources and correspondingly reduces emissions of the same pollutant below the emission baseline at other emission sources.

Chapter: References to "this chapter" or "Chapter 2" in this Part shall mean Pollution Control Board air pollution rules and regulations as contained in Chapter 2: Air Pollution Regulations and as codified under Title 35, Part 200, et seq., of the Illinois Administrative Rules.

Emissions Baseline: The starting point or reference level from which increases and decreases in emissions are measured. The rules governing determination of emission offsets, calculation of net emission increases, and evaluation of alternative control strategies specify the particular emission baseline that applies for that purpose.

Multi-person ACS: An Alternative Control Strategy which includes emission sources which are owned and controlled by different persons who have formed a joint venture for purposes of the ACS.

Potential to Emit: The maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

ug: Micrograms.

Section 212.102 Scope

Pursuant to a permit issued by the Agency under this Part, a person or persons may use an alternative control strategy (ACS) for process or fugitive emission sources in lieu of compliance with certain requirements otherwise applicable under this Part.

Section 212.105 Emission Baseline for Alternative Control Strategies

- a) The baseline for reviewing decreases or increases of emissions from emission sources proposing to utilize an alternative control strategy shall be the lesser of the actual emissions or the allowable emissions prescribed by this chapter.
- b) Notwithstanding subsection (a), an increment of emission reduction shall be creditable under an ACS to the extent that it:
  - 1) was achieved as a result of the installation of pollution control equipment or changes in process, procedures, or materials designed to reduce emissions; and
  - 2) reduced emissions beyond the requirements of Board regulations; and
  - 3) was not relied upon by the Agency to demonstrate or attempt to demonstrate compliance with ambient air quality standards in the compliance year in the State Implementation Plan demonstration.

- c) For purposes of subsection (b), the burden shall generally be on the permit applicant. However, for the purpose of subsection (b)(3) the burden shall be on the Agency to demonstrate that the emission reduction in question (from either the particular emission source or the category of emission sources to which it belongs) was relied upon in the SIP demonstration.

Section 212.110 Permit Application Information

In addition to other information which may be required under this chapter, a permit application under this subpart shall:

- a) List the emission sources to be included in the ACS and the emission baseline the applicant believes to be applicable to each emission source.
- b) Describe the proposed modifications to the emission sources and quantify the emission increases and decreases anticipated to occur as a result of each modification.
- c) Identify the Board regulations and the terms of the Environmental Protection Act to which the applicant believes the ACS provides an alternative.
- d) Describe the methods currently used to assure compliance and the methods proposed to be used under the ACS. Such methods may include recordkeeping, equipment or emissions monitoring, source testing, and material or process specifications.
- e) Provide an analysis of the ACS pursuant to Sections 212.111, 212.112, 212.113.
- f) Provide such other information as the Agency may require to determine compliance with the standards of issuance in Section 212.120, including the results of any source tests or ambient air monitoring.

Section 212.111 Analysis of Emissions

- a) A permit application under this subpart shall provide a comparison of the baseline emissions and the emissions which would be permitted under the proposed ACS for each emission source involved in the ACS. Where appropriate, this analysis shall address differences between the emission sources to be covered by the ACS with regard to:
  - 1) methods of determining emissions;
  - 2) consistency and reliability of the performance of the emission sources and any associated control devices;

- 3) frequency and duration of operation during malfunction or breakdown, or excess emissions during start-up;
  - 4) methods of operation, including operating schedules, range of raw materials or products, etc.; and
  - 5) other characteristics of the emission sources or their operation which may affect equivalence of emissions.
- b) The analysis shall describe any increases in emissions from emission sources outside the ACS which may accompany or affect the proposed ACS.

Section 212.112      Analysis of Environmental Quality

- a) A permit application under this subpart shall provide a comparison of the ambient air quality under existing requirements and the ambient air quality which would exist under the proposed ACS. This analysis shall include dispersion modeling, unless the Agency finds that:
- 1) due to the characteristics of the pollutant, dispersion modeling is inappropriate or unnecessary for determining effects on air quality; or
  - 2) the location of emission sources included in the ACS are not more than 250 meters apart, and the effective plume height of the emission increases and decreases are not significantly different, or
  - 3) differences in location, plume height, operating practice, and other characteristics of the emission sources subject to the ACS are not likely to significantly affect ambient air quality. An effect on ambient air quality is significant if it equals or exceeds the levels specified in the following table:

SIGNIFICANCE LEVELS

| <u>Pollutant</u> | <u>Annual</u>         | <u>24-Hour</u>      | <u>8-Hour</u>         | <u>3-Hour</u>        | <u>1-Hour</u>       |
|------------------|-----------------------|---------------------|-----------------------|----------------------|---------------------|
| SO <sub>2</sub>  | 1.0 ug/m <sup>3</sup> | 5 ug/m <sup>3</sup> |                       | 25 ug/m <sup>3</sup> |                     |
| TSP              | 1.0 ug/m <sup>3</sup> | 5 ug/m <sup>3</sup> |                       |                      |                     |
| NO <sub>2</sub>  | 1.0 ug/m <sup>3</sup> |                     |                       |                      |                     |
| CO <sup>2</sup>  |                       |                     | 0.5 mg/m <sup>3</sup> |                      | 2 mg/m <sup>3</sup> |

- b) The analysis shall demonstrate that emissions permitted under the ACS will result in equivalent or less qualitative risk to public health and welfare than those which would occur without the ACS.

- c) The analysis shall describe any other impacts on the environment which may accompany the proposed ACS.

Section 212.113 Analysis of Methods of Assuring Compliance

A permit application under this subpart shall provide a comparison of the methods of assuring compliance under existing requirements and the methods of assuring compliance which would be used under the proposed ACS. As a minimum, the analysis shall address the effectiveness, reliability, and accessibility of these methods.

Section 212.120 Standards for Issuance

The Agency shall issue a permit containing an ACS if, and only if, the permit applicant demonstrates that:

- a) The ACS provides, in the aggregate with respect to each regulated pollutant, equivalent or less total emissions than would otherwise be required.
- b) The impact of the ACS is environmentally equivalent to that which would otherwise be achieved and maintained under existing requirements.
- c) The methods for assuring compliance with the conditions and requirements of the permit under the ACS are environmentally equivalent to those that are associated with otherwise applicable requirements.
- d) The ACS complies with any applicable requirements contained in Parts IX, X, or XI of this chapter.

Section 212.125 Public Participation

The initial issuance of a permit containing an ACS shall be subject to applicable Agency public participation regulations prior to issuance. At a minimum, an opportunity for public comment shall be provided. A public hearing shall be held upon a finding by the Agency that it is merited due to a significant degree of interest.

Section 212.130 Compliance Dates

- a) No owner or operator subject to a permit utilizing an Alternative Control Strategy is relieved of the responsibility for achieving and maintaining a reduction of emissions as expeditiously as practicable, but not later than the compliance date required under other applicable regulations.
- b) Notwithstanding subsection (a), an owner or operator may demonstrate compliance with Rule 205 of this chapter



pursuant to an Agency-approved alternative compliance plan contained in a permit utilizing an Alternative Control Strategy issued prior to December 31, 1982. The Agency shall approve such an alternative compliance plan upon finding that:

- 1) it extends the compliance date for each emission source subject to the ACS no longer than necessary to enable that emission source to utilize the ACS, but in no case later than December 31, 1987;
- 2) the use of an alternative control strategy will result in either greater or faster overall emission reductions than would otherwise be achieved; and
- 3) such extension is consistent with the requirements of the Federal Clean Air Act, as amended in 1977.

Section 212.140      Records and Reports

- a) The Agency shall require that a permittee operating under an ACS maintain such records as necessary to determine compliance with the requirements of the ACS.
  - 1) These records shall include, but not be limited to the actual and allowable emission rates, or the parameters from which these rates are determined or related operational parameters of the equipment.
  - 2) The records shall be maintained as prescribed in the permit.
  - 3) These records shall be available to the Agency and copies of these records shall be sent to the Agency upon written request. The Agency shall make such records available to the public pursuant to Section 7 of the Act and regulations promulgated hereunder.
- b) A permittee operating under an ACS shall submit to the Agency reports containing such reasonable information and at such reasonable frequency as the Agency may specify pursuant to a condition of a permit or general procedures established by the Agency, to assure that the terms of the ACS are met.
- c) A permittee operating under an ACS shall notify the Agency within 72 hours by telephone or telegram of circumstances, which will make compliance with the requirements of the ACS impossible.

- 1) This notice shall be followed within ten days by written confirmation which describes the circumstances which prevent compliance with the requirements of the ACS and supplies a preliminary Compliance Program which will result in compliance with this Chapter.
  - 2) The permittee shall take all reasonable steps to come into compliance with the ACS or this Chapter as expeditiously as possible.
- d) It shall be a defense to an enforcement action brought for failure of any permittee to comply with the terms of the ACS that compliance was impossible due to extreme and unusual circumstances which could not reasonably be foreseen or avoided if the notification requirement in subsection (c) has been complied with.

Section 212.145      Duration

A permit containing an ACS shall be issued for no longer than five years, or for such shorter period as the Agency may specify as necessary for periodic review of the ACS or to accomplish the purposes of the Act or of this Chapter.

Section 212.150      Permit Conditions

- a) The permit shall specify:
  - 1) All emission limits which apply to emission sources under the ACS, and
  - 2) Any compliance procedures which shall be followed by the permittee.
- b) The permit shall be conditioned so that compliance with the terms of the ACS will continue in the event of change of ownership of emission sources, and such terms will be made applicable to the new owner.
- c) The Agency may impose such other permit conditions in a permit as are necessary to accomplish the purposes of the Act or of this Part.

Section 212.155      Monitoring and Testing

The Agency may require that equipment testing and monitoring, as authorized elsewhere in this chapter, accompany the construction or operation of emission sources under a permit containing an ACS.

Section 212.160      Revision

- a)    Timing
- 1)    An application for revision of a permit containing an ACS shall be submitted at least 180 days prior to the date on which the revision is required to go into effect.
  - 2)    If the standard under this Chapter for an emission source included in the ACS is changed and a revised ACS is being proposed, an application for revision of a permit containing the ACS shall be submitted at least 90 days prior to the date a Compliance Plan must be submitted.
- b)    The applicant shall submit the information specified in Section 212.110 which is necessary to show that the revised ACS will meet the standards of permit issuance specified in Section 212.120.
- c)    Unless the Agency finds that the proposed revisions to the ACS are not substantive in nature and do not alter fundamental details of the ACS which was approved under the prior permit, issuance of the revised permit shall be subject to public participation pursuant to Section 212.125.

Section 212.165      Renewal

- a)    An application for renewal of a permit containing an ACS shall be submitted at least 180 days prior to the expiration of the previous permit.
- b)    Applications for renewal shall contain the information specified in Subsection 212.110. However, an analysis of the effect of the ACS on air quality pursuant to Section 212.112 need be provided only if:
- 1)    The other information submitted pursuant to this Subsection is different from the information upon which the permit was previously issued, and
  - 2)    the differences may significantly affect air quality.
- c)    Unless the Agency finds that changes in the application are not substantive in nature and do not alter fundamental details of the ACS which was approved under the prior permit, renewal of the permit shall be subject to public participation pursuant to Section 212.125.

Section 212.170 Revocation

Violation of any Rule in this Part, any requirement or condition of an ACS permit or any other applicable Board regulation shall be grounds for revocation by the Board of the permit or permits containing an ACS, as well as for application of other sanctions provided in the Act.

SUBPART B: ALTERNATIVE CONTROL STRATEGIES INVOLVING MORE THAN ONE PERSON

Section 212.201 Applicability

Persons who propose or participate in a multi-person ACS shall be subject to the rules found in Subparts A and B of this Part.

Section 212.202 Permit Application

In addition to the information required in Section 212.110, persons who propose a multi-person ACS shall:

- a) Identify the persons having ownership and control of the emission sources to be included in the ACS.
- b) Provide a written agreement showing the participants' intent to pursue the multi-person ACS as a joint venture and to be jointly bound by the terms and conditions of any permits which are issued pursuant to the application.

Section 212.204 Duration

All permits issued under a multi-person ACS shall have the same expiration date.

Section 212.206 Permit Conditions

Each participant in a multi-person ACS shall be issued an individual permit which shall be conditioned on the continuing compliance of the other participants with the limitations in their permits.

Section 212.208 Records and Reports

All records and reports of the participants in a multi-person ACS shall be available for inspection to the other participants upon reasonable notice of a request to inspect.

Section 212.210 Revocation

Permit revocation or other sanctions may be initiated before the Board against any and all persons in the multi-person ACS, regardless of the ownership and control of the emission source at which the violations occurred or any contracts or other agreements between the participants.

Section 212.211 Termination

- a) If a participant in a multi-person ACS intends to terminate involvement in the ACS, written notice shall be sent to the Agency and to the other participants in the ACS at least 180 days prior to the anticipated termination date.
- b) If the ACS will not meet the standards of issuance with only the remaining participants, they may:
  - 1) Propose a revised ACS to include the remaining sources and persons; this proposal shall be submitted to the Agency at least 180 days before new permits are required; or
  - 2) Revert to exclusive operation of their sources and apply for revised permits; such applications shall be submitted at least 90 days before the permits are required.
- c) If the notice of termination of the multi-person ACS does not allow sufficient time to meet the time periods in Subsection 212.211(b) above, the participants may seek variance relief from the Board from the requirements of this Chapter and of the Act.

IT IS SO ORDERED

Board Members J. Dumelle and D. Anderson concurred.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Order was adopted on the 23<sup>rd</sup> day of December, 1981 by a vote of 4-0.

  
 Christan L. Moffett, Clerk  
 Illinois Pollution Control Board