

ILLINOIS POLLUTION CONTROL BOARD
July 23, 1981

IN THE MATTER OF:)
) R81-20
INTERIM BUBBLE RULES,)
CHAPTER 2: AIR POLLUTION)

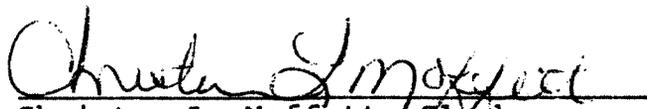
Preliminary Proposal For Rulemaking.

ORDER OF THE BOARD (by I. Goodman):

During the recent legislative session HB 1354 was passed which would add §9.3 to the Illinois Environmental Protection Act. It is now awaiting the Governor's signature. That section mandates that the Board adopt interim "bubble" rules within 120 days of the effective date of §9.3. In order to meet that deadline the Board proposes that a "public draft" of the generic bubble rules be published in the Environmental Register. This public draft incorporates aspects of USEPA's "Generic Bubble Rules", Indiana's proposed bubble rules, and HB 1354. The Board intends that this draft raise issues for discussion and comment, rather than constitute a formal proposal for rulemaking. The Board requests that public comment and alternative proposals on these issues be submitted to the Board within the next 30 days. These comments will be made a part of the record in R81-20. The Board orders that a proposed rule be noticed in the Illinois Register and scheduled for hearings as quickly as possible thereafter.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Order was adopted on the 23rd day of July, 1981 by a vote of 5-0.


Christan L. Moffett, Clerk
Illinois Pollution Control Board

PUBLIC DRAFT - INTERIM BUBBLE RULES - R81-20

Part 212
ALTERNATIVE CONTROL STRATEGIES

Subpart A: Definitions

Section 212.100 Terms Defined Elsewhere

Unless otherwise stated or unless the context clearly indicates a different meaning, the definition of terms used in this Part are the same as those found in the Illinois Environmental Protection Act (Act), (Ill. Rev. Stat. 1979, ch. 111 1/2, Section 1001 et seq.) and other Parts of this Subtitle.

Section 212.101 Definitions

The definitions below shall apply for the purposes of this Part.

Section 212.105 Bubble

An alternative control strategy which allows a source to reduce control requirements at one point by increasing controls correspondingly at another. The bubble can be applied both within a single plant and between different plants in the same area. All applicable emission points are visualized as being under one hypothetical dome with only one emission point.

Section 212.110 Source

Any collection of emission points including fugitives within a building, structure, facility, installation, article, container, machine, or process equipment from which any air pollutants emanate or are emitted, either directly or indirectly.

Section 212.115 Emission Point

Any part of a source which emits or would have the potential to emit any pollutant subject to regulation under the Clean Air Act.

Section 212.120 Owner/Operator

Any person who owns, leases, controls, operates or supervises a facility, an emission source, or air pollution control equipment.

Section 212.125 Person

Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, political subdivision or any other legal entity or their legal representative, agency or assigns. Also included are the Federal, State and local governments.

Subpart B: Permit Applications

Section 212.201 Application

The owner or operator of a source, or different owners or operators of two or more sources, individually or collectively may apply for a permit pursuant to Section 39.1 of the Environmental Protection Act. Applications for such permits shall be submitted on forms provided by the Agency and shall include all information necessary to enable the Agency to make a determination pursuant to Section 39.1(a).

Section 212.02 Alternative Control Strategy

An application for a permit pursuant to Section 39.1 of the Act may propose a bubble which establishes alternative control strategies for emission points including emission limitations which are different from those which would otherwise be applicable under this Chapter. The burden shall be on the applicant to establish that this alternative control strategy will not:

- (a) increase total emission from the bubble, and
- (b) cause or exacerbate a violation of applicable ambient air quality standards.

Section 212.203 Public Notice

Public notice of the receipt of a permit application and the Agency's proposed decision shall be given as required by Section 39.1(c) of the Act. In addition, public notice shall be given of final approval of bubble applications in a newspaper of general circulation in the county or counties where any source to be covered by such permit is located.

Section 212.204 Conditions Precedent to Effectiveness

No bubble shall be effective under this rule until the owner or operator of each source included in the bubble strategy has obtained a new or revised operating permit and any revised emissions limitations have been received by the U.S. Environmental Protection Agency.

Subpart C: Criteria for Approval

Section 212.301 Emission Limits

The bubble must include specific quantifiable emission limits for each emission point in the bubble, and these limits must

be associated with an enforceable testing method. These emission limitations and other related specifications shall be incorporated into legally binding operating permits and compliance timetables.

Section 212.302 Type of Pollutants

Bubble Strategies may be proposed for the following pollutants:

- (a) Total Suspended Particulates (TSP)
- (b) Sulfur Dioxide (SO₂)
- (c) Volatile Organic Compounds (VOC)
- (d) Carbon Monoxide (CO)

Section 212.303 Single Pollutant Limitation

Each bubble must involve emissions of the same pollutant.

Section 212.304 Even Trade Limitation

All emissions under the bubble, including fugitive emissions, must be quantifiable, and trades among them must be even. However, more than one-for-one emission trades may be required where necessary to protect ambient air quality.

Section 212.305 Hazardous Pollutants

No hazardous emission can be offset by a nonhazardous emission. However, within the same criteria pollutant, hazardous emissions may be traded for nonhazardous emission if the source decreases the hazardous emission. In no case shall NESHAP's standards be exceeded.

Section 212.306 Superseding Regulations

The bubble may not supersede the requirements of NESHAP's, NSPS, PSD or LAER regulations.

Section 212.307 Baseline Determination

The total emissions from a bubble shall not exceed the arithmetic sum of the baseline as determined by the following:

- (a) For areas designated attainment under 42 USC 7407
 - (d)(1) the baseline for each emission point will be actual emissions determined as follows:
 - (1) If emissions from the source are separately identified in the emission inventory used in the State's SIP for its ambient air quality

demonstration, the baseline will be the emissions attributed to the source in the SIP.

- (2) If the source is not separately identified in the State SIP ambient air quality demonstrations, the baseline will be average emissions calculated from the operating history of the source for a representative period of time (e.g., TWO or THREE YEARS) up to immediately before the application is filed. If historical data are deemed inadequate by the State, action on an application may be delayed for up to one year while operating data are compiled by the applicant.
- (b) For areas designated as non-attainment under 42 USC 7407(d)(1) which have fully approved SIPS to bring the area into attainment the baseline for each emission point will be:
 - (1) Actual emission determined under subsection (a)(2) of this rule, or
 - (2) Allowable emissions established by the SIP.
 - (c) For areas designated as nonattainment under 42 USC 7407(d)(1) which do not have an approved SIP to bring the area into attainment, the baseline will be determined as follows:
 - (1) Sources whose combined emissions total exceed 100 tons per year (after current controls) must agree to a USEPA approved level of control which represents Reasonably Available Control Technology ("RACT") for all the emission points to be included in a bubble.
 - (2) Sources whose combined emissions total are equal to or less than 100 tons per year (after current controls) may either:
 - (A) agree to USEPA approved RACT limits which will be used as the baseline for computing maximum allowable limits from the bubble, or

- (B) use the baseline established under subsection (b) of this rule. If the source uses the baseline under that subsection it must acknowledge in writing that establishment of alternative limits does not preclude application of more stringent RACT limits developed in the future.

212.308 Hours of Operation and Production Rate Reduction

If limitations on hours of operations or production input rates are used to create reductions used in the bubble, the time period over which they are limited must be consistent with the requirements of this chapter, but in no case may the time period exceed 24 consecutive hours.

212.309 Modeling Demonstration

When modeling is required by these rules, such modeling must show that the alternative emission limitations will not contribute to a new ambient air quality violation and will not interfere with achievement of reasonable further progress toward the attainment of national ambient air quality standards.

212.310 Requirements Applicable to VOC Emissions

VOC emission sources shall:

- (a) Submit the following information with the permit application:
 - (1) Type of emission sources
 - (2) Geographic location of sources
 - (3) List of products processed on each line
 - (4) Type of VOC materials applied
 - (5) VOC content of materials applied
 - (6) Amount of VOC material used
 - (7) Emission control equipment
 - (8) Overall efficiency of control equipment
 - (9) Methodology for estimation of equivalency to emission reductions required by applicable regulations
 - (10) Ozone season adjustment exemptions
 - (11) Emission rate
 - (12) Emission total
 - (13) RFP Provision: (CITE RELEVANT STATE RULE)
 - (14) Operating Hours
 - (15) Any additional information Agency procedures may require.

(b) Maintain daily emission records which include as a minimum all data and production information necessary to determine compliance of the process, equipment, or process line under the bubble. This shall include, but not be limited to, the following:

- (1) Type of VOC materials applied
- (2) VOC content of materials applied
- (3) Amount of VOC material used
- (4) Emission rates per day and year

212.311 Requirements Applicable to TSP and SO₂ Emissions

TSP and SO₂ emission sources shall:

- (a) Submit the following information with the permit application:
 - (1) Location
 - East UTM
 - North UTM
 - ground level elevation
 - (2) Height of release above ground (stack height)
 - actual height
 - GEP height
 - (3) Emission rates (for each pollutant)
 - existing maximum rates for each applicable averaging time (e.g., annual, monthly, 24-hr., 8-hr., 3-hr., 1-hr., etc.)
 - proposed maximum emission rates for each applicable averaging time
 - types of releases (frequency, duration, magnitude)
 - (4) Stack exit and/or release characteristics
 - stack exit diameter
 - stack exit velocity
 - stack exit temperature
 - dimensions of area sources
 - (5) Maps showing location of
 - emission points
 - buildings and obstructions to flow
 - topography (USGS maps)
 - (6) Any additional information which Agency procedures may require

- (b) Maintain daily emission records which include as a minimum all data and production information necessary to determine compliance of the process line under the bubble.
- (c) Submit dispersion modeling of all the changes in emissions attributable to the alternative control strategy unless the Agency finds that either of the following conditions are met:
 - (1) The location of all emission points included in the bubble are not more than 100 meters apart, and the effective plume height of the emission increases and decreases are not significantly different; or
 - (2) Actual emissions from each source included in the bubble are less than 100 tons per year.

All dispersion modeling shall be performed in accordance with methods approved by the Agency in conformity with the USEPA guidance outlined in the "Guideline on Air Quality Models", EPA 450/2-78-027 (April, 1978.)

212.312 Requirements Applicable to Fugitive Dust

Sources applying the bubble to control fugitive dust shall use the best and most appropriate models, such as the Industrial Complex Source Model, in order to show compliance with the requirements of this Rule. Both annual and short-term concentrations must be examined, and particle deposition and fallout should be taken into account. The emission factors used at different emission points involved in trades shall be of equal reliability. The modeling must use the maximum emission rates that are legally enforceable by the Board. As an alternative to modeling, sources may demonstrate the equivalency of the trades by installing the open dust source controls and monitor the results.

Subpart D: Future Emission Limitation Requirements

212.401 Effect of Future Emission Limitations

Should a new or more restrictive emission limitation become applicable to any source included in a bubble under this Rule, the source shall submit permit modifications demonstrating reductions in total bubble emissions equal to or greater than the reduction required by the new emission standards.

Subpart E: Compliance

212.501 Other Applicable Regulations

The bubble shall not exempt any owner or operator from complying with any other applicable regulations under this Chapter.

212.502 Compliance Dates

No owner or operator under the bubble is relieved of the responsibility for achieving and maintaining a reduction of emissions as expeditiously as practicable, but no later than the compliance date required under the applicable regulation.

212.503 State Access to Information

The owner or operator of an emission source under a bubble shall make available copies of reports detailing the nature, specific emission points, and total quantities of all emissions to the State upon verbal or written request, at any reasonable time.

IT IS SO ORDERED.

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