



STATE
OF
ILLINOIS

POLLUTION CONTROL BOARD

STATE OF ILLINOIS CENTER • 100 WEST RANDOLPH STREET • SUITE 11-500 • CHICAGO, ILLINOIS 60601 • 312-917-3620

JOHN C. MARLIN, CHAIRMAN
URBANA, ILLINOIS

JOAN G. ANDERSON
WESTERN SPRINGS, ILLINOIS

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DEKALB, ILLINOIS

BILL S. FORCADE
CHICAGO, ILLINOIS

J. THEODORE MEYER
CHICAGO, ILLINOIS

MICHAEL L. NARDULLI
CHICAGO, ILLINOIS

CERTIFICATION

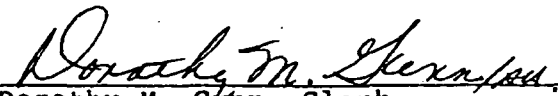
I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, do hereby certify that I have the custody and control of all Board files and the records of the said Pollution Control Board; and that the enclosed items transmitted herewith are a true and exact copy of the original.

Pollution Control Board Newsletter #24, dated June 14, 1971

Pollution Control Board Newsletter #37, dated December 5, 1971

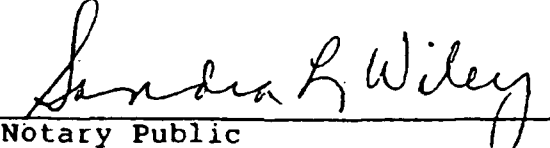
Title 35, Environmental Protection, Subtitle B, Chapter I, Rules and Regulations dated June 1989 with amendments through February 6, 1989

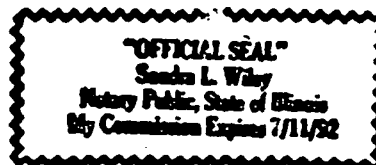
R71-16, Asbestos Regulations, Opinion of the Board on Adoption of Regulations by Mr. Lawton dated January 6, 1972


Dorothy M. Gunn, Clerk
Pollution Control Board

Dated: August 25, 1989

SUBSCRIBED AND SWORN TO BEFORE
ME THIS 25th DAY OF AUGUST 1989.


Notary Public



SC-ALL-15060

SCF-ALLF-03400



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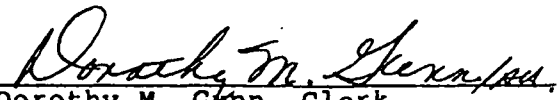
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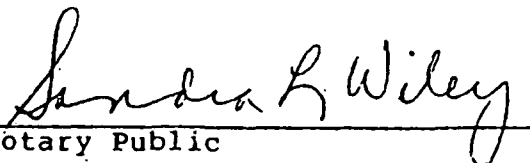
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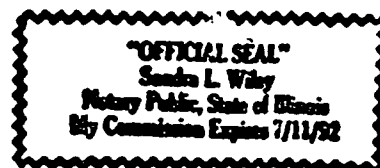
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SC-ALL-15060



STATE OF ILLINOIS
POLLUTION CONTROL BOARD
189 WEST MADISON STREET SUITE 900

DAVID P. CURRIE, CHAIRMAN
SAMUEL R. ALDRICH
JACOB D. DUMELLE
RICHARD J. KISSEL
SAMUEL T. LAWTON, JR.

CHICAGO, ILLINOIS 60602

TELEPHONE
312-793-3820

NEWSLETTER #24
June 14, 1971

DUPAGE COUNTY REGIONALIZATION PLAN HEARINGS AUTHORIZED

At its Danville meeting on June 9, the Board authorized hearings on a proposal which would require the development of a regional wastewater treatment system in DuPage County. The proposal, if adopted, would be a county-wide system of nine sewage treatment plants in accordance with the Regional Wastewater Plan approved by the Northeastern Illinois Planning Commission. Presently, over 90 sewage treatment plants are operating in the county. The county and local governmental units involved would have until January 1, 1972, to submit a plan for accomplishing the regionalization scheme and final compliance would be required by January 1, 1975.

In his explanation of the proposal, Chairman Currie stated that the proliferation of small sewage plants in densely populated and rapidly developing DuPage County makes impossible the correction of existing pollution and constitutes a threat of further pollution in the future. Furthermore, small plants have higher per capita construction and operating costs. County taxpayers, therefore, have to pay a higher price for scattered small treatment plants than they would for larger and more efficient treatment facilities.

Hearings are scheduled for July, August, and September. The hearings will provide an opportunity for the people of DuPage County and Illinois to provide factual information and to express their views on the concept of regionalization. A copy of the proposal is appended to this Newsletter.

ASBESTOS HEARINGS SCHEDULED

Finding that the uncontrolled spraying of asbestos fiber and other fiber-containing material unreasonably interferes with the enjoyment of life and property and presents a severe threat to the public health

and welfare, the Board authorized in Danville that hearings be held on detailed proposed regulations which would restrict the commercial use of products containing asbestos. The set of regulations, if adopted, would be the most comprehensive set of controls for the toxic substance ever enacted.

The proposed regulations would, among other things, require a permit for the manufacturing of asbestos products, for the commercial use of asbestos in construction work and for the demolition of asbestos containing buildings. Demolition of buildings containing asbestos would have to be conducted in accord with strict controls to reduce dust emission. Plants manufacturing asbestos products would be required to meet an emission standard. The spraying of asbestos fiber, done in high-rise construction, would be unlawful. And the use of asbestos in the brake lining of vehicles manufactured after January 1, 1975 and sold for use in Illinois would be prohibited. A copy of the proposed regulation is appended to this Newsletter.

Asbestos-containing products have, in recent years, been widely used, especially in the fireproofing of buildings and in the lining of automobile brakes. These uses and others contribute annually to the discharge of asbestos fiber into the atmosphere. The fiber, once released, is thought to be virtually indestructible, resulting in a gradual, irreversible increase in the amount of asbestos fiber present in the ambient air. Medical evidence has shown that heavy, prolonged exposure to asbestos fiber can cause a lung disease known as asbestosis and a very rare cancer of the lining of the lungs, mesothelioma.

NSSD PHOSPHORUS VARIANCE DENIED

At the Danville meeting, the Board voted to deny a variance request in North Shore Sanitary District v. EPA, PCB 71-36. The District requested that six of its seven lakeside plants (North Chicago, Lake Bluff, Lake Forest, Park Avenue, Ravine Drive, and Carey Avenue) be exempted from the phosphorus effluent standards until December 31, 1972. The one year variance was not requested for its Waukegan plant.

The Board's opinion, written by Mr. Dumelle, points out that the District's cost estimates for compliance were not realistic. The district maintained that temporary phosphorus treatment facilities would cost \$654,000 the first year and \$292,000 annually, thereafter. This sum includes costs for tanks, hardware, chemicals, additional sludge handling, additional labor, and a minimal salvage value. But, at a subsequent hearing relating to the District's compliance to the Board's order in League of Women Voters et al v. North Shore Sanitary District, PCB 70-7, 12, 13, 14, the District made a statement which is in effect an amendment to this variance request, thus substantially lowering the estimated cost. It withdrew its request for a variance as to the North Chicago plant. This removes almost half of the

hydraulic capacity from the request. The Board stated that other factors also reduce the estimated cost: The District could easily use a cheaper method of removal than the alum precipitation method it had chosen, such as the free waste pickle liquor method it uses at its Waukegan plant; as phosphorus removal becomes a more widespread requirement in Illinois, nearby Districts will be willing buyers of used equipment, the salvage value will be more than minimal. The Act admonishes the Board to grant variances only where cases of arbitrary or unreasonable hardship are shown. But the Board ruled that "[m]ere imposition of a money cost standing alone cannot be considered an unreasonable hardship."

The Board stated that since many of the District's recent activities are stymied by litigation it can have no real confidence that if this variance is granted, an extension of the variance will not be asked for a year from now.

LAKE MICHIGAN THERMAL STANDARD ADOPTED

The Board adopted the proposed draft of Thermal Standards for Lake Michigan, R70-2. These standards permit the continued existence of heat sources now in operation which have not been shown to cause harm, so long as they conform to the modified water quality standard which consists of a 3° F. rise limitation and a series of monthly temperatures which are never to be exceeded. The maximum permissible temperature is 80° F. Sources under construction as of January 1, 1971 must meet the new standard, and there are a number of additional conditions designed to minimize any adverse effect and to require modification if significant harm results. Finally, the potential damage inherent in the proliferation of large heat sources is prevented by prohibiting significant new heat sources not under construction as of January 1, 1971. A copy of the proposal is contained in the addenda section of Newsletter #21.

OTHER ACTIONS

At its June 9 meeting in Danville the Board announced the following actions:

In League of Women Voters et. al. v. North Shore Sanitary District, PCB 70-7, 12, 13, & 14, the Board ordered several control programs to be started immediately. These interim measures will help abate pollution violations until District completes its expansion program ordered previously by the Board (March 31, 1971). This order in no way affects the Board's order for the District's phosphorus variance request (PCB 71-3

In Allied Mills, Inc. v. EPA, PCB 71-16, the Board granted a water pollution variance until July 1, 1972, at which time its Taylorville waste treatment facilities must be in compliance with SWB-14. The company must post a performance bond to insure complete treatment of its storm and process waste waters.

In EPA v. C.E. Koons, PCB 71-30, the Board issued a cease-and-desist order restraining Respondent from depositing refuse on his Flora property. He is also to remove or cover the refuse and to pay a \$100 penalty. Due to financial difficulty, he claimed he couldn't operate a landfill in accord with the law. The Board finds that "[p]overty is no excuse; people who haven't money to do business as the law requires shouldn't do business."

In EPA v. Southern Illinois Asphalt Co. Inc., PCB 71-31, the Board issued a cease-and-desist order until Respondent obtain the quired permit and also issued a \$5,000 penalty for its failure to do. The Board also recommended the Agency consider the effect the plant has on the surrounding residential area in McLeansboro before granting the pending permit application. Mr. Lawton's concurring opinion points out that "...compliance with the regulations, which are designed for general application, does not justify the causing of a nuisance."

In Northern Petrochemical Co. v. EPA, PCB 71-47, the Board granted an air pollution variance so that the company may conduct a fire-fighting training course on its Morris property. This case is similar to Deere & Co. v. EPA, PCB 70-20, where the Board noted that "[t]he importance of instructing employees in fire-fighting techniques is clear ... and that ... there is no substitute in learning how to fight fires, for actually fighting fires."

In EPA v. Truax-Traer Coal Co. and Consolidation Coal Co., PCB 71-54, the Board dismissed a purported variance petition because petitioner failed to comply with statutory and regulatory provisions for the filing of a variance petition. In effect the petitioner sought a declaratory judgement that the Act does not apply to its Jackson County operations. The Board also directed the Agency to file within twenty days a detailed report for abatement proposals for the petitioner's operations.

In Electric Wheel Co. v. EPA, PCB 71-55, the Board granted a variance until December 31, 1971, so that the petitioner may complete its ACERP with minor modifications at its Quincy foundry. The Board felt that the Agency's delay in filing recommendations and the company's good faith in pursuing the program were sufficient reasons to grant the variance.

In City of Lincoln v. EPA, PCB 71-56, the Board denied a variance request to burn allegedly diseased elm trees. Upon the City's own admission, the trees weren't infectious but only dead and rotten. The Board stressed that the diseased exception is not to be abused by attempting, under cover of the exception, to burn vegetation blown down by a storm.

In Citizens Utilities Company of Illinois v. EPA, PCB 71-125, the Board granted the DuPage County company's petition to expedite proceedings. The variance request is for temporarily bypassing a stabilization lagoon so it may be cleaned as hot weather has made it substantially non-functional. In this exceptional situation, the Board has waived the 21-day notice rule. But sufficient notice is given by this newsletter to inform interested parties. The hearing will be held in the early part of the week of June 21st.

MISSISSIPPI RIVER THERMAL STANDARDS

The record in Mississippi River Thermal Standard, R 70-16, a citizen initiated proposal to change the Mississippi River thermal discharge regulations, will remain open until June 21. In addition to the testimony and exhibits received in the public hearings at Rock Island and Alton the record has been open to receive communications from interested persons and the testimony regarding thermal discharges in the hearing on the Quad-Cities nuclear electric generating plant permit application, PCB 71-20.

CORRECTIONS

Newsletter #22 contained two typographical errors as follows:

- I. Explanation of Proposed Water Quality Standards Revisions
R 71-14; Part IX: Permits page 15, second full paragraph -
The date in the first line should be December 31, 1973
not December 31, 1971.
- II. Proposed Water Quality Standards Revisions - # R 71-14;
Part II: Water Quality Criteria
Section 203 (b) - The range of pH should be 6.0 to 9.0
not 6.5 to 9.0.

NEW CASES FILED AND HEARINGS AUTHORIZED

PCB 71-127 Illinois State Fair Agency.

Springfield petitioner seeks a variance from open burning regulations to conduct interim fire-fighting training and to dispose of single story building. No hearing was authorized pending Agency recommendation.

PCB 71-128 City of Zion.

Petitioner requests an open burning variance to burn diseased trees in Lake County. No hearing was authorized pending Agency recommendation.

PCB 71-129 Commonwealth Edison Company.

Petitioner seeks a variance from air pollution regulations at three stations in Winnebago, Will and Tazewell counties. A hearing was authorized.

PCB 71-130 Chicago-Dubuque Foundry Corporation.

East Dubuque petitioner seeks a variance from air pollution regulations. The company wants to wait until the United States EPA adopts National Ambient Air Quality Standards before installing control equipment. No hearing was authorized pending Agency recommendation.

PCB 71-131 Willow Creek Drainage District.

Morgan County petitioner seeks a variance from open burning regulations so it may burn refuse from clean-up operations. No hearing was authorized pending Agency recommendation.

PCB 71-132 American National Bank & Trust Co.

Petitioner seeks a variance from the prohibition of new sewer connections to the North Shore Sanitary District in order to connect a new sixty-five unit complex. A hearing was authorized.

PCB 71-133 Thomas and Sandra Keadling.

Lake County petitioners seek variance to connect a one family residence to the NSSD. A hearing was authorized.

PCB 71-134 Union Oil Co. of California.

Chicago Refinery of Union 76 Division seeks open burning variance to conduct fire-fighting training classes. No hearing was authorized pending Agency recommendation.

PCB 71-135 Ravinia Festival.

Petitioner seeks open burning variance so it may burn diseased elm trees at its Highland Park location. No hearing was authorized pending Agency recommendation.

PCB 71-136 A.H. Zamost.

Petitioner requests a variance to connect a new single family residence to the NSSD. A hearing was authorized.

ILLINOIS POLLUTION CONTROL BOARD

Notice is hereby given that the Illinois Pollution Control Board has scheduled the following hearings in addition to those previously announced along with the changes of scheduled meetings as described. Public comments are invited.

June 21	1:00 p.m.	<u>EPA v. City of Champaign v. The Board of Trustees of the University of Illinois and Alpha Material and Fuel Company, PCB 71-51C, Champaign City Council Chambers, Champaign, Illinois.</u>
June 22&23	10:00 a.m.	Hearing continued from June 8, 1971.
June 23	10:00 a.m.	<u>Elgin Jaycees v. Tri-County Landfill Co. et. al., PCB 71-59, Pre-hearing conference, City Council Chambers, Elgin Municipal Bldg., 150 Dexter Ct., Elgin, Illinois.</u>
June 26	10:00 a.m.	<u>Citizens Utilities Co. of Ill. v. EPA PCB 71-125, DuPage County Sheriff's Office, Courtroom #7, 205 Reber, Wheaton, Illinois. (Accelerated Date).</u>
June 29	10:00 a.m.	<u>Proposed Water Quality Standards Revisions, R 71-14, Central Junior High School, Auditorium, 21st & Delmore, Granite City, Illinois.</u>
June 24	10:30 a.m.	<u>Employees of Holmes Brothers v. Merlan, Inc. and L. Mervis, PCB 71-39, City Council Chambers, City Hall, Danville, Illinois.</u>
June 30	10:30 a.m.	<u>Proposed Water Quality Standards Revisions, R 71-14, Southern Illinois University, Neckers Hall, B-440, Carbondale, Illinois.</u>
June 30 & July 7	10:00 a.m.	<u>EPA v. Incinerator, Inc. PCB 71-69, Cicero Public Library, 5221 W. Cermak Rd., Cicero, Illinois</u>
July 1	10:00 a.m.	<u>National Gypsum Co. v. EPA, PCB 71-99, Council Chambers, City Hall, 106 N. Utica St., Waukegan, Illinois.</u>

July 7, 8, & 9	10:00 a.m.	<u>EPA v. Modern Foundry & Manufacturing Co., PCB 71-108, City Council Chambers, Belleville, Illinois.</u>
July 8	10:00 a.m.	Board Meeting, Belleville Court House, Belleville, Illinois.
July 8	10:00 a.m.	<u>Scott Volkswagon, Inc. v. EPA, PCB 71-112 Waukegan Public Library, 128 North County, Waukegan, Illinois.</u>
July 13	9:15 a.m.	<u>Ray Wickstrom, PCB 71-105</u>
	10:30 a.m.	<u>Howard & Barbara Weinstein, PCB 71-107</u>
	11:45 a.m.	<u>David S. McAdams, PCB 71-113</u>
	2:00 p.m.	<u>Robert D. Charles, PCB 71-122</u>
	3:15 p.m.	<u>Dole Construction Co., PCB 71-126; Waukegan Public Library, 128 North County, Waukegan, Illinois.</u>
July 14	10:00 a.m.	<u>City of Monmouth, Ill. v. EPA, PCB 71-121 City Hall Council Chambers, 112 N. Main St., Monmouth, Illinois. (Corrected Date).</u>
July 14 & 15	10:00 a.m.	<u>Sherwin-Williams Co., PCB 71-111; Graham Paint & Varnish Co., Inc., PCB 71- General Paint & Chemical Co., PCB 71-115; Enterprise Paint Mfg. Co., PCB 71-116 Armstrong Chemcon, Inc., PCB 71-117; Jewel Paint & Varnish Co., PCB 71-118; The Valspar Corp., PCB 71-119; N.L. Industries, Inc., PCB 71-120; Illinois Liquor Control Commission Hearing Room, Room 419, 188 W. Randolph St., Chicago, Illinois.</u>
July 21 & 22	10:00 a.m.	<u>Ralston Purina v. EPA, PCB 71-88, University Union, 3rd floor lounge on July 21, Ballroom on July 22, Illinois State University, Normal, Illinois.</u>
July 29	10:00 a.m.	<u>EPA v. Eli Amigoni, PCB 71-89, Supervisor Office, Court House, Eureka, Illinois. (Corrected Date).</u>
July 23	10:00 a.m.	<u>Henry Hannah v. Minnesota Paints, Inc., PCB 71-123, City Hall Council Chambers, 915-16th Ave., East Moline, Illinois</u>

LATE NOTICES

June 17 18, 24, 25 & 28 thru July 2.	9:30 a.m.	<u>EPA v. Granite City Steel Co., PCB 70-34 Circuit Court Courtroom, City Hall, Granite City, Illinois.</u>

ILLINOIS POLLUTION CONTROL BOARD
COMING FORMAL MEETINGS AND HEARINGS

June 17 & 18	10:00 a.m.	<u>Lake Michigan Waste Water Discharge Prohibition R 71-5, and Proposed Water Quality Standards Revisions, R 71-14, Auditorium, Technological Institute, Northwestern University, Evanston, Illinois.</u>
June 17	9:30 a.m.	<u>EPA v. J.C. Dill, PCB 71-42, Danville City Hall, Danville, Illinois.</u>
June 18	10:00 a.m.	<u>Robert H. Monyek v. EPA, PCB 71-80, Waukegan City Hall, 106 N. Utica, Waukegan, Illinois.</u>
June 18	1:00 p.m.	<u>National Starch & Chemical Corp. v. EPA, PCB 71-83, Village Hall, Meridosia, Ill.</u>
June 19	10:00 a.m.	<u>EPA v. Claremont Hills Water & Sewer Co., Inc. PCB 71-87, McHenry County Court House Annex, 121 W. Calhoun, Woodstock, Illinois.</u>
June 21	10:00 a.m.	<u>Robert C. Wagnon v. EPA, PCB 71-85, 10th Floor, Lake County Court House, Waukegan, Illinois.</u>
June 21 22 & 23	1:00 p.m. 10:00 a.m.	<u>EPA v. City of Champaign v. The Board of Trustees of the University of Illinois and Alpha Material and Fuel Company, PCB 71-51C, Champaign City Council Chambers, Champaign, Illinois. Hearing continued from June 8, 1971.</u>
June 23	10:00 a.m.	<u>Elgin Jaycees v. Tri-County Landfill Co. et. al., PCB 71-59, Pre-hearing conference, City Council Chambers, Elgin Municipal Bldg., 150 Dexter Ct., Elgin, Illinois.</u>
June 23	10:00 a.m.	<u>Board Meeting, Chicago Circle Campus, 750 S. Halsted St., Chicago, Illinois.</u>
June 24	10:00 a.m.	<u>Chambers, Bering, Quinlan Co. v. EPA, PCB 71-102, Supervisors Room, Macon County Building, Decatur, Illinois.</u>
June 24	10:00 a.m.	<u>Proposed Water Quality Standards Revision R 71-14, State of Illinois Regional Office Building, 4302 N. Main St., Rockford, Illinois.</u>
June 24	10:30 a.m.	<u>Employees of Holmes Brothers v. Merlan, Inc. and L. Mervis, PCB 71-39, City Council Chambers, City Hall, Danville, Illinois.</u>

June 25	10:00 a.m.	<u>Proposed Water Quality Standards Revisions, R 71-14, Galena City Hall, Galena, Illinois.</u>
June 25	10:30 a.m.	<u>John Ciancio v. EPA, PCB 71-100, Waukegan Public Library, 128 N. County, Waukegan, Ill.</u>
June 25	1:30 p.m.	<u>Mr. and Mrs. Wallace W. Piroyan v. EPA, PCB 71-103, Waukegan Public Library, Waukegan, Ill.</u>
June 25	10:30 a.m.	<u>EPA v. Charles Rhodes, PCB 71-53, Room 502, Macon County Courthouse, 253 E. Wood Street, Decatur, Illinois.</u>
June 26	10:00 a.m.	<u>Citizens Utilities Co. of Ill. v. EPA, PCB 71-125, DuPage County Sheriff's Office, Courtroom #7, 205 Reber, Wheaton, Illinois. (Accelerated Date).</u>
June 28	10:00 a.m.	<u>Quad City Area Regional Air Pollution Control Board v. Village of Cordova, PCB 71-97, County Building, 1504 Third Ave., Rock Island, Illinois.</u>
June 29	10:00 a.m.	<u>Proposed Water Quality Standards Revision R 71-14, Central Jr. High School, Auditorium, Granite City, Illinois.</u>
June 29	10:00 a.m.	<u>EPA v. Williamson County Housing Authority, PCB 71-109, City Hall Herrin, Illinois.</u>
June 29 & 30	10:00 a.m.	<u>EPA v. City of Urbana v. Urbana & Champaign Sanitary District, Saline Branch Drainage District, and the Board of Trustees of the University of Ill., PCB 71-510, Urbana City Council Chambers, Urbana, Illinois.</u>
June 29 - July 2	10:00 a.m.	<u>U.S. Industrial Chemical Co. v. EPA, PCB 71-44, Forty-Martyrs School Hall, Tuscola, Illinois.</u>
June 30	10:00 a.m.	<u>Proposed Water Quality Standards Revision R 71-14, Southern Illinois University, Neckers Hall, B-440, Carbondale, Illinois</u>
June 30	9:30 a.m.	<u>Flintkote v. EPA, PCB 71-68, Wabash County Courthouse, 4th & Market, Mount Carmel, Illinois.</u>

June 30 & July 7	10:00 a.m.	<u>EPA v. Incinerator, Inc.</u> , PCB 71-69, Cicero Public Library, 5221 W. Cermak Rd., Cicero, Illinois.
June 30	10:00 a.m.	<u>EPA v. City of Marion</u> , PCB 71-25, 2nd Floor Courtroom, City Hall, Marion, Illinois.
July 1	10:00 a.m.	<u>Standard Brands v. EPA</u> , PCB 71-98, City Hall, Pekin, Illinois
July 1	10:00 a.m.	<u>National Gypsum Co. v. EPA</u> , PCB 71-99, Council Chambers, City Hall, 106 N. Utica St., Waukegan, Illinois.
July 7, 8, & 9	10:00 a.m.	<u>EPA v. Modern Foundry & Manufacturing Co.</u> , PCB 71-108, City Council Chambers, Belleville, Illinois.
July 8	10:00 a.m.	<u>Freeman Coal Mining Corp. v. EPA</u> , PCB 71-78, City Council Chambers, 1100 Main St., Mt Vernon, Illinois.
July 8	10:00 a.m.	<u>Scott Volkswagon, Inc. v. EPA</u> , PCB 71-112 Waukegan Public Library, 128 North County, Waukegan, Illinois.
July 8	10:00 a.m.	Board Meeting, Belleville Court House, Belleville, Illinois.
July 12	9:30 a.m.	<u>EPA v. Bath, Inc. and John C. Walker</u> , PCB 71-52, Room 502, Macon County Court- house, 253 Eastwood, Decatur, Illinois.
July 13	9:15 a.m. 10:30 a.m. 11:45 a.m. 2:00 p.m. 3:15 p.m.	<u>Ray Wickstrom</u> , PCB 71-105 <u>Howard & Barbara Weinstein</u> , PCB 71-107 <u>David S. McAdams</u> , PCB 71-113 <u>Robert D. Charles</u> , PCB 71-122 <u>Dole Construction Co.</u> , PCB 71-126; Waukegan Public Library, 128 North County, Waukegan, Illinois.
July 14	10:00 a.m.	<u>City of Monmouth, Ill. v. EPA</u> , PCB 71-121 City Hall Council Chambers, 112 N. Main St., Monmouth, Illinois. (Corrected Date).

July 14 10:00 a.m.
 & 15

Sherwin-Williams Co., PCB 71-111;
Graham Paint & Varnish Co., Inc., PCB 71-
General Paint & Chemical Co., PCB 71-115;
Enterprise Paint Mfg. Co., PCB 71-116;
Armstrong Chemcon, Inc. PCB 71-117;
Jewel Paint & Varnish Co., PCB 71-118;
The Valspar Corp., PCB 71-119;
N.L. Industries, Inc., PCB 71-120;
Illinois Liquor Control Commission Hearing
Room, Room 419, 188 W. Randolph St.,
Chicago, Illinois.

July 21 10:00 a.m.
 & 22

Ralston Purina v. EPA, PCB 71-88,
University Union, 3rd floor lounge on
July 21, Ballroom on July 22, Illinois
State University, Normal, Illinois.

July 29 10:00 a.m.

EPA v. Eli Amigoni, PCB 71-89, Supervisor
Office, Court House, Eureka, Illinois.
(Corrected Date).

July 23 10:00 a.m.

Henry Hannah v. Minnesota Paints, Inc.,
PCB 71-123, City Hall Council Chambers,
915-16th Ave., East Moline, Illinois.

LATE NOTICES

June 17, 9:30 a.m.
 18, 24, 25,
 & 28 thru July 2.

EPA v. Granite City Steel Co., PCB 70-34
Circuit Court Courtroom, City Hall,
Granite City, Illinois.

June 17 10:00 a.m.
 & 18

Lloyd A. Fry Roofing Co. v. EPA, PCB 71-4
71-33, One North LaSalle St., Suite 3700,
Chicago, Illinois (Corrected Date).

July 23 10:00 a.m.
 & 30

DuPage County Regionalization, R 70-17
location to be announced.

July 26 10:00 a.m.

Monsanto Co. v. EPA, PCB 71-110, Sauget
City Hall, 2897 Monsanto Avenue, Suaget,
Illinois.

ILLINOIS POLLUTION CONTROL BOARD

June 9, 1971

In the Matter of)

)

)

R 70-17

)

DU PAGE COUNTY REGIONAL)
SEWAGE TREATMENT)

NOTICE OF PROPOSED REGULATIONS

Notice is hereby given that the Pollution Control Board, following earlier inquiry hearings on the subject, has authorized public hearings to be held for the purpose of receiving testimony relating to the adoption of the following proposed new regulations. Mr. George Sullivan will serve as hearing officer and Mr. Jacobo Dumelle as attending Board Member. Hearings will be held as follows:

Public testimony is invited.

PROPOSED REGULATIONS
(Authorized for hearing only, June , 1971.
Not yet adopted by the Board.)

CHAPTER IV: WATER POLLUTION
PART 11: Regional Sewage Treatment

- 1101 Preamble. The proliferation of numerous small sewage treatment plants in densely populated and rapidly developing Du Page County constitutes a severe and intolerable impediment to the correction of present water pollution and a continuing threat of additional pollution in the future. Not only do the higher unit costs of constructing and operating small plants waste finite dollars and therefore contribute to pollution; small plants cannot produce as satisfactory an effluent as can larger plants, because they cannot provide certain types of sophisticated treatment, because they cannot practicably be adequately supervised or maintained, and because they cannot provide adequate standby treatment capacity to prevent pollution in the event of a malfunction. The establishment or continued operation of sewage treatment plants so small as to exhibit these deficiencies, in areas such as DuPage County where the population density is high enough to make larger plants economically feasible and indeed economically far more desirable, is contrary to the anti-pollution policy of the Environmental Protection Act.
- 1102 Regional Plants to Be Constructed. On or before January 1, 1975, all sewage treatment plants now or then existing in DuPage County shall be replaced by nine plants designed and constructed in substantial accordance with the Regional Wastewater Plan approved by the Northeastern Illinois Planning Commission March 3, 1971. Governmental agencies operating these nine plants shall thereafter accept and treat all sewage from tributary areas as designated by that Plan, and all other sewage treatment plants in DuPage County shall cease operation, except as provided in Rule 1005 of this Chapter.
- 1103 Programs to Be Submitted. On or before January 1, 1972, the County of DuPage and every municipality or sanitary district with current responsibility for the treatment of sewage in DuPage County shall file with this Board and with the Environmental Protection Agency a detailed and firm program for compliance with the requirements of Rule 1102 of this Chapter. Such programs, preferably submitted on a joint basis, shall include among other things the following:

- a. A description of the location, capacity, treatment facilities, cost, and service area for the proposed plant that is to accept and treat the sewage from the area under the applicant's jurisdiction;
- b. A firm commitment by one or more responsible governmental agencies to construct and operate the proposed plant, together with a firm schedule for design, award of contracts, commencement of construction, full operation, and abandonment of obsolete plants;
- c. A firm commitment by the affected governmental agencies for the financing of the necessary facilities, through taxation, user charges, revenue and general obligation bonds, special assessments, connection charges, loans, grants, contracts, or otherwise;
- d. An attorney's opinion affirming and explaining the authority of the responsible governmental agencies to carry out their undertaking as described;
- e. Assurance that the program conforms with Rule 1002 of this Chapter and with all applicable regulations respecting air and water pollution and the disposal of solid waste;
- f. Assurances as to what interim measures will be provided to secure compliance with applicable regulations regarding sewage treatment, including water quality standards, before January 1, 1975.

1104 Compliance Hearing. (a) Upon receipt of the programs required by Rule 1103 of this Chapter, or in default of their timely receipt, the Board shall schedule a hearing or hearings in accordance with Chapter I of these Rules and Regulations, in which to determine whether the programs submitted will achieve compliance with this Part. The governments specified in Rule 1103 of this Chapter shall be parties petitioner in such hearings, and the Environmental Protection Agency shall be respondent. The Agency may file a countercomplaint against any person allegedly responsible for any failure to conform with the requirements in this Part.

b. After hearings as specified in paragraph (a) of this Rule, the Board shall determine whether the programs submitted are adequate to achieve compliance with this Part. The Board may modify the submitted programs in any manner conducive to the achievement of the policies or requirements of this Part, and shall order the parties to do whatever is necessary or proper to achieve those ends.

- 1105 Future Construction. No permit shall be granted for the construction or operation of any additional sewage treatment plant in DuPage County, except for interim facilities in the event of a demonstrated emergency, that does not conform with the principles of the Regional Wastewater Plan described in Rule 1102 of this Chapter, or that is of capacity so small as to produce significant diseconomies of scale or to create a significant risk of inadequate treatment, according to the policies expressed in Rule 1101 of this Chapter.
- 1106 Limitation on New Connections. After January 1, 1975, no source of wastes may be connected, and no existing source may be increased in the strength or volume of discharge, to any sewer in DuPage County not tributary to a sewage treatment plant that meets the requirements of this Part.
- 1107 Other Regulations Preserved. Nothing in this Part shall relieve any person from the obligation to comply in all respects with any existing or future regulations, including but not limited to the water quality standards and implementation plan for streams in DuPage County.

R 70-17
DuPage County Regional Sewage Treatment

EXPLANATION OF PROPOSED REGULATIONS
(by Mr. Currie)

DuPage County, bedroom to Chicago, is experiencing the familiar growing pains of a rapidly developing suburban area. Beset by a typical multiplicity of local governments and with its county government hampered by a legal incapacity to supplant local sewage treatment facilities without local consent, DuPage has sprouted an inordinate number of separate treatment plants (83 in 1970 (R. 319)), many of them quite small indeed, and in many cases quite close to one another. Small plants are a necessity in remote areas sparsely populated, but not in DuPage County, which has a high population density and a considerable total population. In DuPage County the costs of transporting sewage to central locations for treatment are low.

Inquiry hearings held in February 1971 have established the disadvantages of unnecessarily small plants, including their threat of pollution, as set forth in the proposed Rule 1001. The testimony of Dr. John Pfeffer of the Institute for Environmental Quality (R. 176-94) is a concise summary of this proof. Operation costs for a plant treating one million gallons per day, he testified, are three times those of a plant treating 100 million gallons, on a per-gallon basis; construction costs are considerably higher as well. As an example of the savings of regional sewage treatment, Dr. Pfeffer cited costs of alternative treatment systems to serve Albany County, New York: For each of the eight affected municipalities to treat its own sewage would have cost \$78,500,000, required 110 operating personnel, and cost \$29.00 per capita for the first year. A regional two-plant system cost \$53,100,000 and required only 35 operators, at half the per capita cost.

On the question of the unsatisfactory effluent from small plants Dr. Pfeffer referred to the use of less effective trickling filters for secondary treatment in such plants, because of the necessity for expert operators, beyond the means of small plants, to run the more acceptable activated sludge facilities. This fact we have recognized in prescribing more lenient effluent standards for small plants (e.g., SWB-12, SWB-13, as amended by # R 70-3, Jan. , 1971); it is an additional reason why we cannot allow unnecessarily small plants in areas that can support large ones. Dr. Pfeffer pointed also to the probability that sophisticated advanced treatment methods required now or in the future will likewise be beyond the effective competence of small plants. Moreover, he testified, larger plants are more reliable, both because

1 For exacting details see Northeastern Illinois Planning

of better maintenance and because of their backup capacity to avoid pollution during malfunctions. In a larger plant, he said,

You have generally multiple units, which, if one of the particular units becomes inactivated for some reason, you can increase the load slightly to the remaining unit without markedly affecting the efficiency.

If you are sitting here with a small plant that has one primary clarifier and you have to shut that clarifier down to replace the mechanism then all the water is bypassed, and in the past it has been letting raw sewage into the stream

So far as our hearings have disclosed, everybody agrees, and has agreed for years, that the present proliferation of small plants is intolerable and that they should be promptly replaced by eight to a dozen relatively large plants each serving a relatively large area. The County has been pressing for regionalization since 1956 (R. 27). The DuPage County Association of Sanitary Districts endorsed a plan for regional treatment in 1966 (R. 20). The DuPage County Mayors and Managers Conference in February of this year adopted a plan for regional treatment (R. 9).

Thus the various governments responsible for sewage treatment in DuPage County-- the municipalities through their Mayors and Managers, the Sanitary Districts, and the County itself--all agree as to what should be done. But they are unable to decide who is to do it or how it is to be paid for. A 1970 bond issue to establish a county-operated regional system was roundly defeated, apparently chiefly because it was thought to impose an excessive proportion of the financial burden on areas of the county that already had provided for their own sewage treatment (R. 9, 22, 23). Even today there remains disagreement. The County apparently expects to run the regional plants (R. 27-31); the municipalities want to control a county-wide waste water board operating several subregional plants (R. 16-17); the sanitary districts want the county divided into several independent sanitary districts (R. 202, 235-36).

In the meantime it is alleged that cities sometimes refuse to accept sewage from outside their boundaries, necessitating the construction of inefficient small plants or the undesirable use of septic tanks in densely populated areas (R. 251, 263) and that the county has blocked the expansion of existing sanitary districts (R. 229-30). At the same time the cities and sanitary

districts do not seem eager to ask the county to take over their functions. Federal construction grants are unavailable for DuPage County until a regional plan is established (R. 121, 125). Bills have been introduced in the General Assembly to set up various regional treatment authorities with the requisite financial powers (R. 16, 234-35). They languish for want of consensus over who is to be abolished and who expanded. We have even been asked by a respectable quasi-public agency to allow inadequate facilities to continue violating the pollution standards while the debate goes on (R. 61). The situation is exquisitely Byzantine.

Legislation to clarify the administrative responsibility and financial authority for carrying out the agreed program is obviously desirable. The General Assembly should create, without referendum, a county-wide sanitary district with exclusive authority to construct and operate sewage treatment facilities throughout the county, and with adequate authority to raise money by taxes, general obligation and revenue bonds, special assessments, user and connection charges, and other means. The County, or the General Assembly, should also enact a subdivision ordinance, if one is not now in effect, requiring any new land developer to pay the cost of additional facilities required to collect and treat its anticipated sewage before permission is given to begin development. We trust some such legislation will be enacted this autumn.²

We cannot, however, count on it, nor afford to wring our hands while we wait. It has taken fifteen years already, and nothing has been done. We have no assurance that legislation will be forthcoming. The existing governments in DuPage County have authority to do what is necessary even under the present patchwork laws; and what they have power to do we can and should order them to do in order to remove the present threat of pollution. See Environmental Protection Act, section 13 and 13 (c), authorizing the Board to adopt regulations to prevent water pollution, specifically including standards relating to the construction and operation of facilities designed to prevent pollution.

2. The bill proposed by DuPage and Lake Counties to allow for county-run subregions each bearing its own costs would be satisfactory if it did not leave the creation of subregions up to a referendum and allow deannexation by local option, and if section 46 of the Environmental Protection Act were simultaneously amended to include counties, as discussed below.

The County and all municipalities and Sanitary districts have authority to construct, acquire, and operate sewage treatment facilities (Ill. Rev. Stat., ch. 24, § 11-141-2 (Municipalities); ch. 34, § 3111 (counties); ch. 42, §§ 306, 306.1 (sanitary districts). All have the power of condemnation without regard for municipal or sanitary district boundaries (ch. 24, § 11-141-2; ch. 34, § 3110; ch. 42, § 307). Municipalities and sanitary districts may accept and treat sewage from outside their boundaries (ch. 24, § 11-146-1; ch. 42, § 316); may contract with one another, if adjacent, for the common construction or use of facilities (ch. 24, § 11-147-1); and may contract for the county to provide sewage treatment, the local government paying its share of costs (ch. 24, § 11-147-4; ch. 34, § 3131). All these governments have authority to raise funds by revenue and general obligation bonds, by user and connection charges, by general taxation, and by special assessment under the new Constitution effective July 1 (R. 168).

The Northeastern Illinois Planning Commission, after extensive study, has adopted a Regional Wastewater Plan for the Chicago metropolitan area. This plan, endorsed by the Environmental Protection Agency at our hearings (R. 149), contemplates a nine-plant system consisting of the existing plants operated by Glen Ellyn and West Chicago and by the Wheaton and Hinsdale Sanitary Districts; a consolidation of the existing Elmhurst and Salt Creek Sanitary District plants; and new plants at Naperville, Woodridge, and (two) in the Addison-Woodridge area (See NIPC, Regional Wastewater Plan, adopted March , 1971; R. 59-61, 63-64). This plan appears, on the basis of the evidence so far before us, to be an entirely reasonable means of eliminating the present problem. In the absence of contrary evidence, we think it should be carried out at once.

We could draft regulations prescribing exactly which government is to build which plant. It would appear sensible, if nothing better can be worked out in a reasonable time, that the Wheaton and Hinsdale Sanitary Districts and Elmhurst, Glen Ellyn, and West Chicago each take responsibility for treatment in its region, since they are operators of existing plants that are to be expanded to become parts of the new plan, and that the County build the new plants. Or we could order everyone else to contract for the County to supply service everywhere. We shall not hesitate to order just this if the parties and the legislature cannot agree on a better institutional framework such as a single county-wide district as suggested above. But we propose to allow six months for such a framework to be created before doing so. Consequently the present proposal is to require the implementation of the NIPC plan by January, 1975, allowing six months for a resolution of the administrative

questions, which will be settled in an adjudicative Board hearing that will approve a final detailed program, and three years for the construction of facilities. The proposal makes clear that future plants must conform to the regional principle; that no new development will be permitted after 1975 until regionalization is accomplished; and that regionalization will not be permitted to postpone compliance with existing or future water quality standards or requirements for advanced waste treatment.

Mayor Nottke of Itasca put the matter clearly and succinctly:

There has been much talk, much dialog, much discussion going on, and nothing has been done I think we are going to lean on the Pollution Control Board We need you here to say, "This must be done." We can't sit back and wait on the county or the mayors and managers to come up with a solution, because in my opinion . . . it will never happen. We are not going to get an agreement because we have constant bickering between the sanitary districts and the communities. They are all looking for perpetuation of their system, for autonomy, for control. I think it has got to be taken away and I say the Pollution Control Board has to be the controlling agency and you have to come up with a definite situation and say, "This is going to be it." You have a mandate from the people of DuPage County, and that is to form a nine-plant district (R. 275, 280, 289).

We agree that it is for us to unravel the present jam by prescribing what shall be done. We cannot create sanitary districts, but we can order plants built and intend to do so. The streams cannot wait for consensus among those who will not come to terms. We add that it is not only the people of DuPage County who suffer from the inability of their governments to get together on this issue; those downstream of DuPage's inadequate plants are forced to accept whatever DuPage puts into its revolting streams. It is therefore imperative that the people of the County not be permitted a veto power over the construction of necessary treatment works, and it will become even more essential, if the Legislature chooses to entrust the job of carrying out NIPC's plan to the County itself, that section 46 of the Environmental Protection Act be amended, as the Board has already requested, to permit non-referendum bonds by counties as well as by other local governments when ordered by this Board. The omission of counties from section 46 was an oversight that has no justification in policy; we urge once again that it be quickly rectified.

Public comment on the proposed regulations is invited.

27-16

ASBESTOS REGULATIONS:
CONTROL OF SPRAY INSULATION

PREAMBLE

It is hereby determined that the uncontrolled discharge of asbestos fiber into the environment tends to severely endanger the public health and welfare and that the uncontrolled spraying of other fiber-containing material unreasonably interferes with the enjoyment of life and property.

1. Definitions

- Agency - The Illinois Environmental Protection Agency.
- Asbestos - Any fiber or any mixture containing fiber of hydrated silicate mineral, which, on the basis of its crystalline structure, falls into one of two categories:
- (1) pyroxenes - chrysotile fiber;
 - (2) amphiboles - crocidolite, amosite, tremolite, actinolite or anthophyllite fiber.
- Commercial Activity - Any activity done for hire or having financial profit as a primary aim.
- Debris - Asbestos-containing waste produced by the demolition of a structure.
- Spraying - The pneumatic application of material used for fireproofing or insulation.
- Waste - Any asbestos-containing matter which has been or is intended to be discarded.

2. General Requirements

No commercial activity, not otherwise hereinafter prohibited, involving the discharge of asbestos fiber into the environment from the construction, alteration, repair or demolition of a structure or from the processing or manufacturing of asbestos-containing products, shall be conducted unless the person or entity in charge of such activity complies with the following regulations:

A. A permit shall be obtained from the Environmental Protection Agency to engage in such activity. Before obtaining such permit, the applicant shall demonstrate compliance with the following safeguards:

(1) The designation of personnel to exercise full-time supervisory authority over all aspects of the activity from which the release of asbestos fiber into the environment could result, in such a manner as to insure compliance with the pertinent asbestos control regulations.

(2) That each employee engaged in such activity has completed or will complete a satisfactory course of instruction on the potential hazards of exposure to asbestos fiber including the precautions that must be observed to prevent or restrict the dispersion of asbestos fiber into the environment.

(3) That such additional safeguards as are hereinafter specifically required and such precautions consistent with the purpose of these regulations as the Environmental Protection Agency deems necessary under the circumstances shall be complied with.

B. Facilities shall be provided and procedures instituted and supervised that prevent the removal of asbestos-containing material from the site on the clothing of employees.

C. Asbestos-containing wastes shall be immediately vacuumed or otherwise collected where vacuuming is impossible, and shall be placed in a container resistant to tearing or breaking under normal handling conditions, which shall be tightly sealed and clearly marked as containing asbestos waste. Such containers shall be placed directly upon a vehicle for disposal by burial at an approved site.

This subsection (C) shall not apply to the demolition of a structure, except as provided in Section 4(A)(1) and (6) or to the disposal of sludge waste except as provided in Section 5(C).

3. SPRAY FIREPROOFING
AND INSULATION

A. The spraying of asbestos-containing material is prohibited.

B. Non-asbestos particulate matter used for insulation or fireproofing shall not be sprayed unless the following procedures are taken:

(1) Before the start of spraying operations, all floor areas shall be swept clean and cleared of all objects, material and equipment other than that employed in the application of the fiber-containing material, or, in the alternative, all such objects, material and equipment shall be covered with plastic or plastic-coated tarpaulins.

(2) The entire floor or area to be sprayed shall be enclosed with plastic or plastic-coated tarpaulins in a manner which shall preclude the escape of fiber-containing material from the enclosure. All interior open areas such as elevator shafts and stairwells shall be enclosed in a manner which shall prevent the escape of fiber-containing material from the working area. "Stack effect" of the shafts, stairwells and comparable spaces shall be considered in providing proper enclosures.

(3) Regardless of adherence to the stated control practices, any visible emission of fiber-containing materials beyond the building perimeter will be considered a violation.

(4) In case of visible emission of fibrous material from the construction site, immediate steps shall be taken to cause the cessation of such emissions by either effective control measures or work stoppage at the source of the emissions. There shall then be immediate and complete cleanup of all material that has escaped the construction site, and measures shall be taken that will insure that no further dispersal of any fibrous material into the atmosphere can occur.

(5) The entire sprayed area, all ledges and surfaces including tarpaulins within the enclosure shall be thoroughly vacuumed upon completion of the spraying operation and immediately before the enclosure is dismantled. The vacuum cleaner shall contain a strong, single service, disposable inner bag of durable material which shall be removed from the vacuum cleaner and tightly sealed. The bag shall then be placed in a container and disposed of at an approved site in accordance with Section 1(C).

(6) All areas used for opening bags containing fibrous material or the changing of hoppers shall be enclosed so as to prevent the escape of such material from the immediate area in which such activity occurs.

(7) Any plenum or other structure coated with or containing fibrous insulation and used in the circulation of air in a building

shall be thoroughly cleaned of all debris and waste insulation. All applied fiber-containing insulation within a plenum or duct shall be coated with a sealant which precludes exposure of the fiber-containing material to the circulating air.

4. CONSTRUCTION, ALTERATION AND REPAIR OF STRUCTURE

A. (1) The cutting, trimming, fitting or stripping of asbestos-containing material in the construction, alteration or repair of a structure which is done at the site of such structure shall be conducted within a special enclosure designed to preclude the escape of asbestos fiber from the immediate area of such enclosure.

(2) The mechanical exhaustion of dust from such enclosure to the ambient air is prohibited unless such exhaust system is equipped with a fabric filter for dust collection.

B. Asbestos-containing material applied in the construction alteration or repair of a structure shall be coated with a sealant, provided with a cover or installed in some other manner so as to preclude exposure of the asbestos fiber to the circulating air.

5. DEMOLITION

A. Where the risk of public exposure to asbestos fiber from the dislodging of asbestos-containing materials is present, no demolition of a structure shall be initiated unless all safeguards necessary and practicable to reduce the emission of dust are taken.

Such procedures shall include, but are not necessarily limited to:

(1) Boilers and pipes insulated with asbestos-containing material shall be wetted and stripped before toppling of walls is begun. This procedure shall be followed, where practicable, as to all other asbestos-lined surfaces. Such asbestos waste shall be immediately bagged and disposed of in accordance with Sec. I(C).

(2) Demolition by toppling of walls is prohibited except within an enclosure approved by the Environmental Protection Agency as part of the permit granted for demolition of that structure.

(3) Before the demolition of any section of the structure, adequate wetting to suppress the dust shall be employed.

(4) Asbestos-containing debris shall not be dropped or thrown from any floor but shall be transported by dust-tight chutes or buckets. Asbestos-containing debris in chutes or buckets shall be sufficiently wetted to preclude dust dispersion at the point of discharge.

(5) All asbestos-containing debris shall be thoroughly wetted before loading into trucks, other vehicles or containers. During transport such waste shall be enclosed or covered so as to prevent dust dispersion. Asbestos-containing debris shall be disposed by burial at an approved site.

B. In the event asbestos-containing matter becomes airborne beyond the property boundaries or in the event freezing temperatures preclude the use of water for dust suppression, demolition work shall cease until adequate alternate measures can be taken.

6. MANUFACTURING

A. (1) No factory, plant or enterprise which engages in the processing or manufacturing of any asbestos-containing product shall emit asbestos fiber into the ambient air in excess of .5 fiber per cubic centimeter of air. The ambient air quality at the boundary of such factory, plant or enterprise shall not exceed .05 fiber per cubic centimeter of air.

(2) Only fibers of 5 microns or greater in length with a length to breadth ratio of 3 to 1 shall be counted..

(3) Sampling shall be determined by the membrane filter method with phase contrast microscopy at 430 X magnification.

B. No water used in processing or manufacturing which contains concentrations of asbestos fiber shall be discharged into sewage systems or to the waters of Illinois.

C. Waste sludge containing asbestos collected from settling ponds shall be enclosed during transport and shall be disposed by burial at an approved site.

7. ASBESTOS-CONTAINING PRODUCTS

It is hereby determined that the continuous emission of asbestos fiber from asbestos-containing products contributes sig-

nificantly to the increasing volume of asbestos-fiber in the ambient air and endangers the health of future generations.

A. No product which may emit asbestos-fiber during its transportation shall be transported unless such product is enclosed in such a manner as to preclude the emission of asbestos fiber into the ambient air.

B. The use of asbestos in the brake lining of vehicles manufactured after January 1, 1975, and sold for use in Illinois is prohibited.



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NEWSLETTER #37
December 5, 1971

BOARD GRANTS QUAD-CITIES A-PLANT PERMIT

The Illinois Pollution Control Board at a meeting November 15, granted a partial operating permit to Commonwealth Edison and Iowa-Illinois Gas & Electric Company to operate a nuclear power plant on the Mississippi River in the Quad-Cities area near Cordova. The permit was granted under extremely strict conditions.

The Board noted that Iowa-Illinois operates an old, smoky coal-fired power plant in Moline that cannot be retired until the two 809 m/w boiling-water reactors at the Quad-Cities plant are in operation.

The Board also reaffirmed the policy it had adopted with reference to the Dresden atomic power plant, that of requiring the best practicable technology for controlling radioactive emissions.

Again rejecting the argument that the federal government had pre-empted the field of radioactive emission control, the Board ordered the companies to add a recombiner and eight charcoal beds to the facility to reduce gaseous radioactive emission by thirty times the amounts the companies had requested to discharge. Installation of these controls will be completed by December, 1973, with acceptable emissions in the meantime, the Board said.

With regard to liquid radioactive wastes, the Board said that these would have a relatively insignificant effect on drinking water, but might adversely affect aquatic life, and that a "maximum recycle" system would therefore be required. This system, which will cost only 2-1/2 percent of the total plant cost and will take two years to install, will reduce liquid radioactive discharges by a factor of approximately 22.

On the issue of thermal pollution, the Board pointed out that dilution of heated discharges from the plant with water from the Mississippi was unacceptable standing alone, since discharges would, at low flow, comprise 1/4 to 1/5 of the river's entire flow and would be 23 degrees warmer than the river. Accordingly, the Board accepted the companies' proposal and ordered the installation of a diffuser pipe to more equally distribute the heated wastes in the river. The companies were authorized to operate only one of the two 809 m/w reactors in order to minimize the thermal pollution hazard until adequate controls have been installed. They were also told to study the feasibility of installing spray modules at Quad Cities similar to those in operation at Edison's Dresden facility.

Board Member Jacob Dumelle dissented from the opinion, for the following reasons: 1. The lack of time in which to adequately assess the Emergency Core Cooling System (ECCS) testimony received only eight working hours previous to the decision; 2. the excessive and unnecessary radiation dosage to the public in the vicinity of the Quad-Cities nuclear plant under the permit; and 3. the opinion that a jet diffuser will serve as a barrier to the passage of fish in the Mississippi River.

BOARD AMENDS EDISON PERMIT FOR DRESDEN 3

At its formal meeting November 23, the Board ordered several changes in the conditions of the permit it had issued March 3, 1971, for the operation of Commonwealth Edison's Dresden Unit 3 near Morris, Illinois.

The changes involved areas of gaseous emission control, liquid radioactive control, and thermal input control into the Illinois River. Overall, the changes result in stricter controls on the entire Dresden 3 operation, along with earlier compliance with Board regulations.

In the area of gaseous emissions, the Board changed the annual average allowed to 80,000 microcuries per second from 25,000 mps. This was adopted after new testimony demonstrated to the Board that the 80,000 level was the annual average for a unit of the Quad-Cities plant essentially identical to Dresden 3. The 25,000 level had been ordered after an Edison witness testified that this would be a realistic level. In testimony concerning the Quad-Cities permit application, the same witness noted that he meant the 25,000 level to be indicative of an average to be sustained over the years, and not as an annual average. The Board noted that the rates of emission at the 80,000 level will not cause a significant increase of the dose to the population around the plant.

The Board also ordered that if emissions at any time exceed 37,500 mps at Dresden 3, Edison shall initiate operating procedures, to the extent permitted without interrupting electric service, to reduce such release.

The Board also moved up the date by which Edison is required to construct gaseous emission control facilities. The original date had been thirty months from the date of the permit, or September 3, 1973. The new completion date is April 1, 1973. On and after that date, gaseous radioactive emissions from Dresden Unit 3 shall not exceed an annual average of 3000 microcuries per second.

The Board also stipulated that:

.Edison shall immediately begin to install the maximum recycle system for liquid emissions, plus a system which would require that decontamination solutions be drummed and disposed of as a solid waste.

.Edison shall not operate Dresden Unit 3 if any of the emergency core cooling systems are unable to operate.

.Edison be granted a variance from the 5° F. limitation of SWB-8 during the winter months. The variance ends November 23, 1972.

Mr. Dumelle dissented from the majority opinion, stating that he took exception to changing the annual allowable emission level from 25,000 mps to 80,000 mps. Mr. Dumelle felt that the change weakened the Board's position, and might affect pending litigation against the Board in the Appellate Court.

BOARD ADOPTS MISSISSIPPI THERMAL STANDARDS

At its meeting November 15, the Board adopted the final draft of the Mississippi Thermal Standards, #R70-16. Mr. Dumelle said that this was a milestone for the Board, the standards being the last to be adopted for Federal approval. The order is attached.

DUPAGE COUNTY SEWAGE REGIONALIZATION

Also at its November 15 meeting, the Board authorized the publication of the proposed final draft of the DuPage County Sewage Regionalization plan, #R70-17.

The Board endorsed in principle the nine service area concept for DuPage County proposed by the Northeastern Illinois Planning Commission.

The Board noted that all regionalization efforts will be directed toward reducing the number of sewage treatment facilities at the earliest reasonable time. A series of regional plants, well-operated and strategically located, the Board said, will greatly minimize the polluttional load upon the DuPage County streams and assure conformance with the Environmental Protection Act.

Hearing Officers will be appointed for each of the nine regions in order to develop further recommendations for a regional wastewater treatment program for DuPage County.

The proposed final draft is attached.

ASBESTOS PROPOSAL

At its November 15 meeting, the Board authorized the publication of the proposed final draft of the regulations to control the use of Asbestos, #R71-16. Strict controls are incorporated in the draft. A copy is attached.

PLAN HEARINGS ON DISPOSABLE BEVERAGE CONTAINER REGULATIONS

At its meeting in Chicago on November 22, the Board authorized statewide hearings on the recommendation of the Illinois Institute for Environmental Quality for a regulation governing disposable beverage containers (attached). Hearings will be scheduled in the near future and notification of dates and locations of the hearings will be published in the Newsletter.

Those wishing to testify or having questions relating to the proposal should communicate with Steven N. Klein at the offices of the Pollution Control Board in Chicago, or at (312) 793-3620.

PARKING AT CIRCLE CAMPUS

The Assistant Director of Auxiliary Services of the University of Illinois Chicago Circle Campus has asked that we inform all persons wishing to attend meetings of the Board held at the Circle Campus of the following:

"Guest parking in Lot 2, Circle Campus parking facility located at Morgan and Vernon Park Place (directly adjacent to University Hall), is extremely limited. Reservations made through the Campus Parking Office are necessary to insure space. (Contact Rebecca K. Wilson, 966-5053). Fifty cents (\$.50) will be charged for each car."

CORRECTIONS (AIR)

In Newsletter #35 (November 10, 1971) we published the Illinois Environmental Protection Agency's proposed statewide emission control standards and limitations for several pollutants (R71-23). We herewith note the following typographical errors and corrections in said proposal:

Page 6 of the "General Discussion of Part 2", in Table 2 (Summary of Sulfur Dioxide and Particulate Emission Standards), please make the following changes:

- a) Incinerators (New residential and Commercial Buildings), change 0.05 grains per SCF to 0.10 grains per SCF.
- b) Incinerators (Municipal, Industrial & Commercial Incinerator Estmts.), change 0.01 grains per SCF to 0.05 grains per SCF.

CORRECTIONS (WATER)

In Newsletter #36 (November 15, 1971), we published the proposed final draft of effluent criteria and related provisions for final comments (R70-8, R71-14, R71-20). We herewith note the following typographical error and correction in said proposal:

Page 8 of the proposed final draft, Rule 408 (Additional Contaminants), the date which was published, December 31, 1971, is incorrect and should read "December 31, 1973."

OHIO WABASH THERMAL STANDARDS

Attached to this newsletter is a copy of the Board's recently adopted Thermal Standards for the Ohio and Wabash Rivers.

OTHER ACTION

In PCB 70-25S, The Olin Corporation v. EPA, the Board extended Olin's variance to December 1, 1972, for the purpose of disposing of approximately 1,100,000 pounds of rocket grains by open burning. The Board noted that no suitable alternative to disposal by open burning had been found.

In PCB 71-51U, EPA v. City of Urbana v. Urbana and Champaign Sanitary District, and Saline Branch Drainage District, and the Board of Trustees of the University of Illinois, the Board dismissed this action on the oral motion of the Complainant, without prejudice.

In PCB 71-88, EPA v. Ralston Purina Company, the Board rejected a purported settlement agreement among the company, the Attorney General, and the intervening Bloomington neighbors, and ordered further proceedings to be held.

In PCB 71-227, EPA v. Miller Lumber Company, the Board ordered Miller to cease and desist the open burning of wood refuse and by-products at his sawmill near Orchard Mines, Illinois. A penalty of \$500 was assessed.

In PCB 71-230, EPA v. Pfizer, Inc., the Board penalized Pfizer \$1,000 for violations of the Environmental Protection Act, and ordered the company to cease and desist further emissions from its East St. Louis plant in violation of the Act.

In PCB 71-246, EPA v. Yetter Oil Company, the Board penalized Yetter \$500 and ordered the company to cease and desist from discharging any oil into the waters of the State in violation of anti-pollution regulations. Yetter operates an oil field near Colmar, Illinois.

In PCB 71-258, EPA v. The Town of Hutsonville, and Joe D. Goff, the Board penalized the respondents \$500 and ordered them to cease and desist the operation of a refuse disposal dump in Crawford County until it is in full compliance with open burning and refuse disposal regulations.

In PCB 71-260, G.L. Miller Motor Sales, Inc. v. EPA, the Board dismissed this petition seeking a variance from the North Shore Sanitary District sewer connection ban for a new automobile sales facility.

In PCB 71-269, Richard P. Glovka v. North Shore Sanitary District, the Board denied a motion by the respondents to dismiss this citizen's complaint which alleges violations with respect to new connections to sewers tributary to overloaded treatment plants of the NSSD.

In PCB 71-324, EPA v. Incinerator, Inc., the Board granted an 11-month variance to Incinerator of Cicero, Illinois, to operate an incinerator under a number of conditions, including that the unit shall not be operated in excess of 250 tons of refuse per day at a moisture content of more than 20 percent.

In PCB 71-334, Robert L. Winsor v. EPA, the Board granted a variance to connect one home in Zion, Illinois, to the NSSD. The home has a bad septic tank that cannot be replaced.

In PCB 71-343, NSSD v. EPA, the Board consolidated this proceeding with PCB 70-7, League of Women Voters v. NSSD, and authorized a hearing to consider NSSD's request for partial relief from the sewer connection ban.

In PCB 71-327, Farmers Opposed to Tollway v. Illinois State Toll Highway Authority, the Board granted a hearing on the complainants' allegation that the extension of the East-West Tollway will cause various kinds of pollution. The Board noted, however, that it had no intention of ordering an end to the building of new highways in Illinois.

In PCB 71-51C, EPA v. City of Champaign v. the Board of Trustees of the University of Illinois, and Alpha Material and Fuel Company, the Board denied a Motion by the University for a Stay of that portion of the Board's September 16 order which directs the University to submit a report concerning the causes and possible solutions for pollution of Boneyard Creek.

In PCB 71-52, EPA v. Bath, Inc., et al and PCB 71-244, Bath, Inc. v. EPA, the Board denied a motion for modification of the Board's original order concerning operation of a refuse site near Decatur. The Board noted that the motion raised only issues that had already been resolved in the original order.

In PCB 71-291, EPA v. James McHugh Construction Company and the City of Chicago, the Board denied a motion to dismiss by the City of Chicago. The City contended that it is an independent contractor and is not liable for the acts of those with whom it has contracted. The suit alleges water pollution of the Chicago River stemming from a construction project.

In PCB 71-325, EPA v. Airtex Products, Inc., et al, the Board denied a motion by Airtex to dismiss. Airtex held that the original complaint by the EPA contains insufficient information. The Board noted that additional information can be provided by discovery.

In PCB 70-8, EPA v. Village of Glendale Heights, the Board formally lifted the sewer connection ban it had imposed on Glendale Heights in its order of February 17, 1971. The Board took this action after receipt of a certification from the EPA that the Village had accomplished the expansion, tertiary treatment, and effluent disinfection needed to comply with regulations.

NEW CASES FILED AND HEARINGS AUTHORIZED

On November 22, the Board considered the following new cases:

PCB 71-357 Hayes Branch Drainage District v. EPA

Petitioner seeks a variance to open burn wood and vegetable matter from clearing and grubbing operations near Tuscola, Illinois. A hearing was pending further information from the EPA.

PCB 71-358 EPA v. Aluminum Coil Anodizing Corp.

An enforcement action alleging certain acts of air pollution by the company at its Fox River Grove plant. A hearing is mandatory.

PCB 71-359 Decatur Memorial Hospital v. EPA

Petitioner seeks a variance to operate a coal burning boiler which has emitted smoke in excess of regulations. No hearing was set pending comment by the EPA.

PCB 71-360 Village of Orion v. EPA

Petitioner seeks extension of compliance date to water quality standards until April 1, 1973. A hearing was authorized.

PCB 71-361 Glenn Younkens d/b/a Younkens Mobile Home Park v. EPA

Petitioner seeks a variance to continue to operate their present waste water facility for one year, said facility having been found lacking by the EPA. Petitioner contends that the Village of Blue Mound, in which the Park is located, is planning construction of a new public treatment facility to which the Park could connect in 1973. A hearing was authorized.

On November 23, the Board considered the following new cases:

PCB 71-362 The New Jersey Zinc Company v. EPA

Petitioner seeks a variance to operate a sulphuric acid and diammonium phosphate plant at De Pue, Illinois, with emissions in excess of Proposed Rules and Regulations establishing SO₂ emission standards. A hearing was authorized.

PCB 71-363 Vance Venable v. EPA

Petitioner seeks a variance from the NSSD sewer connection ban to allow connection of his home to the Zion, Illinois, sewage system. No hearing was set pending further information.

PCB 71-364 EPA v. Village of Augusta and Dennis Chicken Products Co.

Enforcement action alleging various acts of water pollution in Augusta. A hearing is mandatory.

On November 29, the Board considered the following new cases:

PCB 71-366 The Kankakee Foundry Company v. EPA

Petitioner seeks a variance for one year in which to comply with emission standards at its grey iron foundry. A hearing was authorized.

PCB 71-367 EPA v. Consolidated Foods Corp. and Hollywood Brands

An enforcement action alleging various acts of air pollution at the company's Centralia, Illinois plant. A hearing is mandatory.

ILLINOIS POLLUTION CONTROL BOARD
COMING FORMAL MEETING, HEARINGS AND NEW HEARINGS

* December 7	10:00 a.m.	<u>Whetzel Construction Company v. EPA,</u> PCB 71-302, Holiday Inn, 1505 North Neil Street, Champaign, Illinois
December 7	9:30 a.m.	<u>EPA v. Alton Box Board Company,</u> PCB 71-318, Weinheimer Community Building, 1106 Main Street, Highland, Illinois
December 7	10:00 a.m.	<u>Elgin Jaycees et al v. Tri-County</u> <u>Landfill Company et al, PCB 71-59,</u> Municipal Building, City Hall Council Chambers, 150 Dexter Court, Elgin, Illinois
December 7	10:00 a.m.	<u>Effluent Criteria, R70-8, and Water</u> <u>Quality Standards, R71-14, Illinois</u> Building Auditorium Illinois State Fairgrounds, Springfield, Illinois
December 9	10:00 a.m.	<u>FORMAL BOARD MEETING, Liquor Control</u> <u>Commission, 188 West Randolph Street,</u> Room 419, Chicago, Illinois
December 9	10:00 a.m.	<u>EPA v. Allied Chemical Corporation,</u> PCB 71-326, Council Chambers, City Hall, 400 North Hazel, Danville, Illinois
December 10	10:00 a.m.	<u>Proposed Regulations for the Applica-</u> <u>tion of Plant Nutrients, R71-15,</u> <u>Southern Illinois University, Univer-</u> <u>sity Center, Mississippi-Illinois</u> Room, Edwardsville, Illinois
December 10	10:30 a.m.	<u>EPA v. Sterling Alloy Casting Corp.,</u> PCB 71-248, Council Chambers, 630 West 10th Street, Rock Falls, Illinois
December 14	10:00 a.m.	<u>EPA v. American Generator & Armature</u> <u>Company, PCB 71-329, 160 North LaSalle</u> Street, Room 1922, Chicago, Illinois

* New hearing

December 14 & 15	10:00 a.m.	<u>Effluent Standards, R70-8, and Water Quality Standards, R71-14, University of Illinois, Chicago Circle Center, 750 South Halsted Street, Chicago, Illinois</u>
December 14, (15 & 16, if necessary)	10:00 a.m.	<u>Richard P. Glovka v. North Shore Sanitary District, et al, PCB 71-269, Public Library Auditorium, Assembly Room, 128 North County Street, Waukegan, Illinois</u>
December 14 through 17	9:30 a.m.	<u>Proposed Emission Standards for the Attainment of National Ambient Air Quality Standards, R71-23, Theater, Field Museum, Roosevelt Road at South Lake Shore Drive, Chicago, Illinois</u>
December 16	9:00 a.m.	<u>EPA v. Darrill Industries, PCB 71-347, Liquor Control Commission, 188 West Randolph Street, Room 419, Chicago, Illinois</u>
December 17	10:00 a.m.	<u>Chicago-Dubuque Foundry Corporation v. EPA, PCB 71-331, City Council Chambers, 193 Sinsinawa Avenue, East Dubuque, Illinois</u>
December 18	10:00 a.m.	<u>Lake County, Dept. of Public Works v. EPA, PCB 71-337, Public Library, 128 North County Street, Waukegan, Illinois</u>
December 18	10:00 a.m.	<u>Proposed Emission Standards for the Attainment of National Ambient Air Quality Standards, R71-23, Peoria City Hall, Room 400, 419 Fulton, Peoria, Illinois</u>
* December 21	10:00 a.m.	<u>FORMAL BOARD MEETING, Oak Park Library, 834 Lake Street, Oak Park, Illinois</u>
December 22	10:00 a.m.	<u>Proposed Emission Standards for the Attainment of National Ambient Air Quality Standards, R71-23, Mississippi-Illinois Room, Southern Illinois University, Edwardsville, Illinois</u>

* New hearing

• December 27	10:00 a.m.	<u>EPA v. Aluminum Processing Corp.,</u> PCB 71-340, City Council, Aurora, Illinois
• December 27 & 28	10:00 a.m.	<u>North Shore Sanitary District v. EPA,</u> PCB 71-343, Waukegan Public Library, 128 North County Street, Illinois
• December 29	9:00 a.m.	<u>EPA v. Mascoutah Township, PCB 71-346,</u> Mascoutah City Hall, Mascoutah, Illinois
January 5	10:00 a.m.	<u>EPA v. McHugh, Healy & Kenny Construc-</u> <u>tion Company, et al, PCB 71-291,</u> Weymouth Kirkland Courtroom, University of Chicago Law School, 1111 East 60th Street, Chicago, Illinois (continued)
• January 10	9:30 a.m.	<u>Scott Air Force Base v. EPA, PCB 71-232,</u> St. Clair Courthouse, Belleville, Ill.
January 10, 11 & 12	10:00 a.m.	<u>EPA v. Solid Waste Disposal Company,</u> PCB 71-236, Rosemont Village Hall, 6126 North River Road, Rosemont, Illinois
January 24 through 28; January 31, February 1 & 2	10:00 a.m.	<u>Application of Commonwealth Edison</u> <u>Company for Permits for Zion Station</u> <u>Units 1 and 2, PCB 71-328, Waukegan</u> Public Library, 128 North County Street, Waukegan, Illinois
• January 4	10:00 a.m.	<u>Farmers v. Illinois State Toll Highway</u> <u>Authority, PCB 71-306, 160 North</u> LaSalle Street, Room 1922, Chicago, Illinois
• January 5	10:00 a.m.	<u>Mattison Machine Works v. EPA,</u> PCB 71-277, and <u>EPA v. Mattison</u> <u>Machine Works, PCB 71-330, City Council</u> Chambers, 425 East State Street, Rockford, Illinois

- **New hearings.**

MISSISSIPPI THERMAL STANDARDS

ORDER

- I. Rule 1.05 c of Rules and Regulation SWB-12, Rule 1.05 (4) and 2.05 (3) of SWB-13 are hereby amended to read as follows:

All sources of heated effluents shall meet the following restrictions outside of a mixing zone which shall extend no farther in any direction from an effluent discharge than 600 feet. The mixing zone shall include no more than one-fourth of the cross sectional area of the river nor shall it, at any time, extend to more than one-half of the surface of any river sector.

- A. There shall be no abnormal temperature changes that may affect aquatic life unless caused by natural conditions.
- B. The normal daily and seasonal temperature fluctuations that existed before the addition of heat due to other than natural causes shall be maintained.
- C. The maximum temperature rise at any time or place above natural temperatures shall not exceed 5°F.
- D. In addition, the water temperature at representative locations in the main river shall not exceed the maximum limits in the following table during more than one percent of the hours in the 12-month period ending with any month. Moreover, at no time shall the water temperature at such locations exceed the maximum limits in the following table by more than 3°F.

	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
Mississippi River (Wisc. Border to Iowa Border) (°F)	45°	45°	57°	68°	78°	85°	86°	86°	85°	75°	65°	52°
Mississippi River (Iowa Border to Alton Lock and Dam) (°F)	45°	45°	57°	68°	78°	86°	88°	83°	86°	75°	65°	52°
Mississippi River (So. of Alton Lock & Dam) (°F)	50°	50°	60°	70°	80°	87°	89°	89°	87°	78°	70°	57°

Main river temperatures are temperatures of those portions of the river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river.

- II. A. The owner or operator of a source of heated effluent which discharges 0.5 billion British thermal units per hour or more shall demonstrate in a hearing before this Board not less than 5 or more than 6 years after the effective date of these regulations or, in the case of new sources, after the commencement of operation, that discharges from that source have not caused and cannot be reasonably expected to cause significant ecological damage to the River. If such proof is not made to the satisfaction of the Board, appropriate corrective measures shall be ordered to be taken within a reasonable time as determined by the Board.
 - B. Permits for heated effluent discharges, whether issued by the Board or the Environmental Protection Agency, shall be subject to revision in the event that reasonable future development creates a need for reallocation of the assimilative capacity of the river as defined in the regulation above.
 - C. The owner or operator of source of heated effluent shall maintain such records and conduct such studies as may be required by the Environmental Protection Agency or in any permit granted under the Environmental Protection Act.
 - D. Appropriate corrective measures will be required if, upon complaint filed in accordance with Board rules, it is found at any time that any heated effluent causes significant ecological damage to the River.
- III. Rule 1.07 (4) of SWB-12 and Rule 3.01 (4) of SWB-13 are hereby repealed.

OHIO-WABASH THERMAL STANDARDS

ORDER

- I. Rule 1.05c of Rules and Regulations SWB-9 and SWB-10 are hereby amended to read as follows:

All sources of heated effluents shall meet the following restrictions outside of a mixing zone which shall extend no farther in any direction from an effluent discharge than 600 feet. The mixing zone shall include no more than one-fourth of the cross sectional area of the river nor shall it, at any time, extend to more than one-half of the surface of any river sector.

A. There shall be no abnormal temperature changes that may affect aquatic life unless caused by natural conditions.

B. The normal daily and seasonal temperature fluctuations that existed before the addition of heat due to other than natural causes shall be maintained.

C. The maximum temperature rise at any time or place above natural temperatures shall not exceed 5°F.

D. In addition, the water temperature at representative locations in the main river shall not exceed the maximum limits in the following table during more than one percent of the hours in the 12-month period ending with any month. Moreover, at no time shall the water temperature at such locations exceed the maximum limits in the following table by more than 3°F.

	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
Ohio River(°F)	50°	50°	60°	70°	80°	87°	89°	89°	87°	78°	70°	57°
Wabash River & Other Interstate Tributaries (°F)	50°	50°	60°	70°	80°	90°	90°	90°	90°	78°	70°	57°

Main river temperatures are temperatures of those portions of the river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river.

II. A. The owner or operator of a source of heated effluent which discharges 0.5 billion British thermal units per hour or more shall demonstrate in a hearing before this Board not less than 5 nor more than 6 years after the effective date of these regulations or, in the case of new sources, after the commencement of operation, that discharges from that source have not caused and cannot be reasonably expected to cause significant ecological damage to the River. If such proof is not made to the satisfaction of the Board appropriate corrective measures shall be ordered to be taken within a reasonable time as determined by the Board.

B. Permits for heated effluent discharges, whether issued by the Board or the Environmental Protection Agency shall be subject to revision in the event that reasonable future development creates a need for reallocation of the assimilative capacity of the river as defined in the regulation above.

C. The owner or operator of a source of heated effluent shall maintain such records and conduct such studies of the effluents from such source and of their effects as may be required by the Environmental Protection Agency or in any permit granted under the Environmental Protection Act.

D. Appropriate corrective measures will be required if, upon complaint filed in accordance with Board rules, it is found at any time that any heated effluent causes significant ecological damage to the River.

III. Paragraph 4 of Rule 1.08 of SWB-9 and SWB-10 is hereby repealed.

ILLINOIS POLLUTION CONTROL BOARD
November 30, 1971

In the matter of)
) R71-16
ASBESTOS REGULATIONS)
)

NOTICE OF PROPOSED FINAL DRAFT

Following hearings, the Board on November 23, 1971 authorized publication of the following proposed final draft of asbestos emission regulations for final public comment. Written comment will be accepted until December 15, 1971, with final adoption expected in late December, 1971 or early January, 1972.

ILLINOIS POLLUTION CONTROL BOARD
Rules and Regulations

(Proposed final draft published for public comment November 30, 1971. Not adopted by the Board. Comments are invited and should be directed to Samuel T. Lawton, Jr.)

Chapter V: Hazardous Substances
Title I: Asbestos and Spray Insulation and Fireproofing

Table of Contents

Part I:	<u>Introduction</u>
	101. Authority
	102. Policy
	103. Definitions
Part II:	<u>General Requirements</u>
	201. Safety and Waste Disposal
	202. Permit for manufacturing
Part III:	<u>Construction, Alteration and Repair of Structure</u>
	301. Spray asbestos prohibited
	302. Non-asbestos spray insulation
	303. Enclosure for asbestos construction
	304. No visible emission
	305. Preclude exposure to circulating air
Part IV:	<u>Demolition</u>
	401. Necessary and practicable safeguards

- Part V: Manufacturing
- 501. Emission standards; Sampling & Counting
 Procedures
 - 502. Venting of all emissions to central sources.
 - 503. Inspection
 - 504. Monitoring and reporting
 - 505. Process waste water effluent criteria
 - 506. Sludge disposal
 - 507. Transportation of asbestos - containing
 products
 - 508. No visible emission
- Part VI: Local Enforcement
- 601. Obligation to enforce

PART I: INTRODUCTION

101. Authority

Pursuant to the authority in Sections 9, 10 and 13 of the Environmental Protection Act which empower the Board to adopt regulations forbidding the "sale, offer, or use for reasons of air pollution control" of any article, and to set "standards specifying the maximum amounts or concentrations of various contaminants that may be discharged into the atmosphere"; and to set standards for the issuance of permits for the operation of any equipment or facility capable of causing or contributing to air pollution; and to promulgate "conditions regarding the... use of any....article determined by the Board to constitute an air pollution hazard"; and to adopt effluent standards limiting the amounts of contaminants that may be discharged into the water of Illinois, the Board adopts the following rules and regulations:

102. Policy

It is the purpose of the General Assembly in adopting the Environmental Protection Act to maintain and enhance the purity of the air and water of Illinois in order to protect health, welfare and the quality of life. Accordingly, it is hereby determined that the uncontrolled discharge of asbestos fiber into the environment tends to severely endanger the public health and welfare and that the uncontrolled spraying of fiber-containing materials unreasonably interferes with the enjoyment of life and property.

It is the purpose of these regulations to control the amount of asbestos fiber released into the environment from the major sources of emission. Such control is necessary not only to protect those members of the public who are in proximity to heavy concentrations of asbestos fiber but also to safeguard the health of future generations endangered by the continuous discharge of asbestos fiber which can be toxic and which tends to be cumulative both in the atmosphere and in the human body.

Where health can be protected by the adoption of an emission standard or of procedural safeguards, such a course has been pursued. In those instances where restriction is unfeasible because of the unusual nature of the emission source (spray asbestos at construction sites) a product ban has been resorted to. This prohibition has been made with full consideration given to the available alternative materials.

It is also the purpose of these regulations to reduce the emission of non-asbestos particulate from spray-fireproofing and insulation. To protect against these emissions, the biological effects of which are unknown, procedural safeguards have been enacted.

103.

Definitions

Agency	The Illinois Environmental Protection Agency
Asbestos	Any fiber or any mixture containing fibers of hydrated silicate mineral, which, on the basis of its crystalline structure, falls into one of two categories: (1) pyroxenes - chrysotile fiber; (2) amphiboles - crocidolite, amosite, tremolite, actinolite or anthophyllite fiber.
Board	The Pollution Control Board of Illinois.
Commercial Activity	Any activity done for hire or having financial profit as a primary aim.
Debris	Asbestos-containing waste produced by the demolition of a structure.
Spraying	The pneumatic application of material used for fireproofing or insulation.
Waste	Any asbestos-containing matter which has been or is intended to be discarded.

PART II: General Requirements

201. After June 30, 1972 no commercial activity, not otherwise hereinafter prohibited, involving the potential discharge of visible amounts of asbestos fiber or asbestos-containing materials into the environment from the construction, alteration, repair or demolition of a structure or from the processing or manufacturing of asbestos-containing products, shall be conducted unless the person or entity in charge of such activity complies with the following regulations:

(a) Personnel shall be designated to exercise full-time supervisory authority over all aspects of the activity from which the release of asbestos fiber into the environment could result, in such a manner as to insure compliance with the pertinent asbestos control regulations.

(b) Each employee engaged in such activity shall complete a course of instruction on the potential hazards of exposure to asbestos fiber, including the precautions that must be observed to prevent or restrict the dispersion of asbestos fiber into the environment.

(c) Facilities shall be provided and procedures instituted and supervised that prevent the removal from the site of visible amounts of asbestos-containing material on the clothing of the employees.

(d) Asbestos-containing wastes shall be immediately vacuumed or otherwise collected where vacuuming is impossible, and shall be placed in a container resistant to tearing or breaking under normal handling conditions, which shall be tightly sealed and clearly marked as containing asbestos waste. Such containers shall be placed directly upon a vehicle for disposal by burial at a sanitary landfill.

Section 201(d) shall not apply to the demolition of a structure, except as provided in Section 401 (d) and (e) or to the disposal of sludge waste except as provided in Section 506.

202. After June 30, 1972 the manufacturing or processing of asbestos containing products is prohibited unless the person or entity in charge of such activity has obtained a permit from the Agency. Before obtaining such permit the applicant shall demonstrate compliance with Sec. 201 and such additional standards as are hereinafter specifically required.

PART III: Construction, Alteration and Repair of a
Structure

301. The spraying of asbestos-containing material is prohibited after March 31, 1972.
302. Non-asbestos fibrous matter shall not be sprayed in an area open to the atmosphere unless the following procedures are taken:
- (a) The entire floor or area to be sprayed shall be enclosed with plastic or plastic-coated tarpaulins in a manner which shall preclude the escape of fiber-containing material from the enclosure. All interior open areas such as elevator shafts and stairwells shall be enclosed in a manner which shall prevent the escape of fiber-containing material from the working area.
 - (b) The entire sprayed area, all ledges and surfaces including tarpaulins within the enclosure shall be thoroughly vacuumed upon completion of the spraying operation and immediately before the enclosure is dismantled.
303. (a) The cutting, trimming, fitting or stripping of asbestos-containing material in the construction, alteration or repair of a structure which is done at the site of such structure in an area open to the atmosphere shall be conducted within a special enclosure designed to preclude the escape of asbestos fiber from the immediate area of such enclosure.
- (b) The mechanical exhaustion of dust from such enclosure to the ambient air is prohibited unless such exhaust system is equipped with a properly sized fabric filter for dust collection or an equivalent device as approved by the Agency.
304. Compliance with Sections 302 and 303 notwithstanding, visible emissions of fiber-containing material in an area open to the atmosphere shall be considered a violation.
305. Asbestos-containing material applied in the construction, alteration or repair of a structure shall be coated with a sealant, provided with a cover or installed in some other manner so as to preclude emission of the asbestos-containing material to the circulating air. Any plenum or other structure coated with or containing asbestos-containing insulation and used in the circulation of air in a building shall be thoroughly cleaned of all debris and waste insulation.

PART IV: Demolition

401. Where the risk of public exposure to asbestos fiber from the dislodging of asbestos-containing materials is present, no demolition of a structure shall be initiated unless all safeguards necessary and practicable to reduce the emission of dust are taken.

Such procedures shall include, but are not necessarily limited to:

- (a) Boilers and pipes and steel members insulated or fireproofed with asbestos-containing material shall be wetted and stripped before toppling of walls is begun. This procedure shall be followed, where practicable, as to all other asbestos-lined surfaces. Such asbestos waste shall be immediately bagged and disposed of in accordance with Section 201(d).
- (b) When demolition by toppling occurs such reasonable enclosure for dust emission control as is compatible with the character of the structure shall be employed.
- (c) Before the demolition or toppling of any section or wall of the structure, adequate wetting to suppress the dust shall be employed.
- (d) Asbestos-containing debris shall not be dropped or thrown from any floor but shall be transported by dust-tight chutes or buckets. Asbestos-containing debris in chutes or buckets shall be sufficiently wetted to preclude dust dispersion at the point of discharge.
- (e) All asbestos-containing debris shall be thoroughly wetted before loading into trucks, other vehicles or containers. During transport such waste shall be enclosed or covered so as to prevent dust dispersion. Asbestos-containing debris shall be disposed by burial at a sanitary landfill.

PART V: Manufacturing

501. (a) After June 30, 1972 a factory, plant or enterprise which engages in the processing or manufacturing of any asbestos-containing product shall discharge no visible emission of particulate matter from such manufacturing or processing into the ambient air and shall emit no concentrations of asbestos fiber in excess of 2 fibers per cubic centimeter of air.

(1) Sampling of emissions shall be by the membrane filter method and according to the procedures recommended in the ASME Power Test Code 27-1957, or other procedures generally accepted by persons knowledgeable in the state of the art.

(2) Counting shall be according to the procedure outlined in Edwards, G.H., and Lynch, J.R., "The Method Used by the U.S. Public Health Service for Enumeration of Asbestos Dust on Membrane Filters," Ann. Occupational Hyg. (Oxford), 11 (1): 1-6, Jan. '68; with 20 fields per sample, counted at random using phase contrast microscopy at 430 x magnification and counting only fibers 5 microns or greater in length, with a length to breadth ratio of 3 to 1 or greater.

502. Any factory, plant or enterprise which engages in the processing or manufacturing of any asbestos containing product shall enclose all asbestos handling facilities so that exhaust air can be ducted through necessary air pollution control equipment and samples taken of the gases which are emitted into the ambient air.
503. Any factory, plant or enterprise for which a permit is sought or has been granted pursuant to Sec. 202 hereunder shall be subject to inspection by the Agency at any reasonable time, without prior notice.
504. At a frequency to be determined by the Agency, any factory, plant or enterprise which engages in the processing or manufacturing of any asbestos-containing product shall sample the exhaust from such factory, plant or enterprise and submit the emission data to the Agency.
505. A factory, plant or enterprise the manufacturing processes of which add asbestos fiber to water shall not discharge such process waste water to the sewers or waters of Illinois unless such process waste water is given the best available treatment consistent with technological feasibility and economic reasonableness.
506. Waste sludge containing asbestos and collected from settling ponds shall be enclosed during transport and shall be disposed by burial at a sanitary landfill.
507. No product which may emit asbestos-fiber during its transportation shall be transported unless such product is enclosed so as to preclude the emission of asbestos fiber into the ambient air.

508. Notwithstanding compliance with Sections 506 and 507 the visible emission of particulate matter in the course of such transportation shall be considered a violation.

PART VI: Local Enforcement

601. It shall be the obligation of local governments as well as the Agency to enforce by appropriate means the requirements of Section 201, of Parts III, IV and of Sections 506, 507 and 508.

R71-16 Asbestos

Explanation of Revision of Proposed Regulation

The regulation proposed and explained in Newsletter #24 on which public hearing was held is generally similar to the proposed final draft. A summary of the significant substantive changes follows:

I. The permit requirement of Part II have been restricted to manufacturing emission sources. This is in accord with the Agency testimony that presently it has inadequate staff to handle the permit load created by a blanket requirement. All manufacturers of asbestos products would have to obtain a permit by June 30, 1972.

II. Parts III and IV of the original proposal have been combined under one heading covering construction uses of asbestos products. A grace period, until March 31, 1972, has been added to the proposed ban on spray asbestos. In the interest of efficient enforcement the numerous restrictions on the spraying of non-asbestos fibrous material have been reduced to requirements for enclosure and for vacuuming. Also this section has been changed to make clear that these safeguards are required only when spraying of non-asbestos materials occurs in an area open to the atmosphere. This "open to the atmosphere" modification has also been added to the section controlling the cutting, trimming, fitting or stripping of asbestos-containing materials at a construction site. Part III now contains a "no visible emission" standard which must be met regardless of adherence to the required procedural safeguards. This should permit easier enforcement and tend to insure greater compliance with the safeguards.

The original proposal contained two regulations controlling the general application of asbestos-containing materials and the application of non-asbestos materials in air ducts or plenums. This has been altered to require that only asbestos-containing materials, used in any construction work, be so installed as to preclude emission of the fiber to the circulating air. There is little medical data available to prove or disprove the toxic effects of the multitude of non-fibrous construction material, although one such product, fiberglass, would appear to be biologically inert. The Board prefers to act on the safe side of health in regard to spraying operations, which can emit large quantities of fiber if uncontrolled. In any event such uncontrolled emissions constitute a nuisance dust and could be controlled on that basis alone. These reasons do not apply with equal force to the non-spray application of non-fibrous materials in construction.

III. Part IV controlling demolition remains unchanged except for a rewording of the requirement for enclosure. The final proposal is intended to require an enclosure only when necessary to prevent dispersion of dust and only an enclosure which is reasonably compatible with the structure to be demolished. In some cases total enclosure can be feasibly achieved. With other structures, a ground level enclosure may be the limit of compatibility.

IV. Part V, controlling manufacturing sources, is changed to require an emission standard of 2 fibers per cubic centimeter and no visible emissions. While some testimony indicated the difficulty in measuring compliance with a numerical emission standard, overall the evidence establishes both the need (protection against the great proportion of invisible fiber) and the ease of measurement of such a criterion. A "no visible emission" standard has been added to the numerical standard to simplify enforcement against exceptionally dirty emission sources. A grace period, until June 30, 1972, has been added to permit acquisition of the necessary control equipment to attain the emission standard.

References are made to the method to be used in collecting and counting emission samples. The sampling method is that generally used in sampling particulate emissions. The counting method is that reliably used by the U.S. Public Health Service.

A requirement has been added, at the Environmental Protection Agency's suggestion, to channel all asbestos emissions inside the plant through control equipment and to exhaust such emissions through points where samples can be taken. This is intended to prevent venting through windows or doors or other avenues of escape on which sampling cannot be adequately performed. The Agency is also given the power to inspect manufacturing premises at reasonable times to determine compliance. Also, the manufacturer must engage in monitoring and reporting. The latter two additions are in keeping with the Board's practice in most areas of regulation.

The waste water discharge provision now requires no discharge of process water to which the manufacturer has added asbestos unless best available treatment technology is first utilized.

A "no visible emission" standard has been added to the transportation regulation.

The original proposal to ban asbestos brake lining has been dropped for the time being. While the evidence shows that brake lining decomposition is a significant source of background levels of asbestos, these ambient air levels are quite small and have not been shown to be a health hazard (although they have not been shown not to be). In addition adequate alternatives to asbestos-lined brakes are not yet available, although closed

PROPOSED BEVERAGE CONTAINER REGULATION

PART I: DEFINITIONS

- 101 "Beverage" is beer, ale, other malt beverages, soda water, and carbonated soft drinks in liquid form intended for human consumption.
- 102 "Beverage container" is an individual, separate, sealed bottle, can, jar or carton made of metal, glass, plastic, or other material or combinations of such materials, containing a beverage for consumption or use off the premises on which it is sold or offered for sale.
- 103 "Consumer" is every person who purchases a beverage in a beverage container for use or consumption.
- 104 "Dealer" is every person who engages in the sale of beverages in beverage containers to consumers.
- 105 "Person" is any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, political subdivision, state agency, or any other legal entity, or their legal representative, agent or assigns.
- 106 "Use or consumption" includes, but is not limited to, the exercise of any right or power over a beverage incident to the ownership thereof, other than the sale or the keeping or retention of a beverage for the purposes of sale.

PART II: DEPOSIT

- 201 Every sale and every offer for sale of a beverage in a beverage container by a dealer to a consumer in Illinois shall be subject to deposit by the consumer of not less than five cents with the dealer.
- 202 No person shall sell or offer for sale beverages in beverage containers to a consumer unless he collects the deposit required by section 201, and undertakes to return the full amount of such deposits upon return to him of the beverage container sold by him.

-11-

braking systems, preventing the emission of asbestos dust are possible. The Board will follow the medical and engineering aspects of this problem and, possibly, may return to it.

Finally, local governments are obliged to enforce these regulations, except for the manufacturing provisions. Much of the problem arises from numerous construction activities, and the Agency cannot adequately supervise these many emission sources. The "no visible emission" standard has been added especially to facilitate local government and citizen assistance in enforcement.

- 203 A dealer shall not refuse to accept from any person any empty beverage container sold by the dealer, or refuse to return at the time the beverage container is returned the full amount of the deposit on such beverage container.
- 204 Every dealer shall accept return of beverage containers, and shall return deposits, at the same location and at all times at which beverages in beverage containers are sold by him.
- 205 Every container of the same size, brand, and type as those sold by the dealer shall be accepted for return by him unless he shows conclusively that the particular containers offered for return were not purchased from him.

PROPOSED BEVERAGE CONTAINER REGULATION

A. EXPLANATORY STATEMENT.

The attached proposed regulation deals with beverage containers. It would implement the recommendations of the Illinois Solid Waste Management Task Force. The Task Force was created pursuant to a requirement of Section 6 of the Illinois Environmental Protection Act of 1970 (Ill.Rev.Stat. ch.111 1/2, §1006). Performing its statutory duties, the Task Force considered the problem of beverage containers as they affect the environment. After its study, the Task Force adopted a specific recommendation for regulatory action by the Pollution Control Board. Section 6 provides that "the Board shall make rules and regulations... based upon such recommendations."

The Task Force recommendation reads as follows:

"That a regulation be enacted requiring that all soft drink and malt beverage containers be redeemable by the consumer for a minimum of five cents per container at the retail level of trade."

The proposed regulation would impose such a requirement. Other provisions of the proposal are included to insure that the deposit system will work.

The Task Force did not propose specific regulatory language. The proposed regulation is only one suggested means for implementing the Task Force recommendation and is offered solely to assist the Board. Under the Act, the Task Force recommendation alone is to guide the Board.

The Task Force members voting for the recommendation did so for one or more of the following reasons: (1) litter control; (2) reduction of the quantities of solid waste and of disposal burdens; (3) cost savings to consumers; (4) creation of large recycling facilities. All of these reasons focus on the policy of Section 20 of the Act, which the Board is authorized to implement by regulations, of "encouraging and effecting the recycling and reuse of waste materials." (Ill.Rev.Stat. ch.111 1/2, §§1020, 1022).

The Board has authority to adopt this proposed regulation under either Section 6 or Section 22 of the Act.

A report of the Task Force subcommittee (IIEQ Document No. TF-1) contains information concerning the recommendation. That information includes evidence that failure to recycle and reuse beverage containers leads to litter, waste of resources, and disposal burdens.

B. SECTION BY SECTION ANALYSIS

PART I: DEFINITIONS.

- § 101. The Task Force recommendation refers to "soft drinks." The definition of "beverage" here sharpens this term without expanding or limiting its scope. to insure that persons affected by the regulation have adequate notice of its coverage. This definition is similar to § 1(i) in the Oregon Law (see IIEQ Document No. TF-1, p. 46.) It does not cover orange juice, fruit juices, or liquor. Liquor containers are regulated to some extent by federal law.
- § 102. Beverage containers are defined in detail to insure adequate notice of the scope of the regulation.
- § 103. The proposed regulation applies only to the transaction between the ultimate consumer and the person from whom he purchases beverages in beverage containers. The definition of consumer, and the co-ordinate definition in § 106 of "use or consumption," focus the regulation on the retail level of trade, as specified in the Task Force recommendation.
- § 104. The definition of "dealer" parallels the definition of "consumer," focusing on the retail level of trade. The dealer will usually be a retail store, such as a grocery, drug or package goods store. However, the definition of "dealer" is broad enough to include any seller with respect to those of his sales which are made to customers fitting the § 103 definition of a "consumer." Thus, it includes sellers who do not normally sell to consumers; but only with respect to transactions with consumers.
- § 105. The definition of "person" is the definition in § 3(i) of the Environmental Protection Act of 1970.
- § 106. The definition of "use or consumption" relates to the definition of "consumer" in § 103.

PART II: DEPOSIT.

- § 201. This section would impose the deposit requirement proposed in the Task Force recommendation. By virtue of the definitions of "consumer" and "dealer," the deposit would be imposed only at the retail level of trade, as the Task Force recommended. Read together with § 202, this section would require every included transaction to include a deposit of at least five cents, to be held by the dealer until the container is returned. Once the container has been returned, the deposit is returned in full. Consequently, this section would not impose a tax or charge or other payment which is permanently transferred from one pocket to another in violation of § 27 of the Environmental Protection Act. The regulation would leave to the operation of the free market, and the economic self-interest of the parties, development of relationships between dealers, distributors, bottlers, and manufacturers. Since the point of the proposed regulation is to get containers back to a point in the distribution system where they can be recycled and where they will not be littered, the public interest is satisfied when the return to the dealer occurs.
- § 202. This section sets forth the specific obligations of the dealer at the time of the sale to collect the deposit, and to promise to accept the return of empty containers and return the deposits. The dealer need only accept containers sold by him. Any obligation to accept any container, regardless of origin, might impose disproportionate burdens on some dealers. However, the dealer's right to reject empty containers would be subject to the burden of proof provision of § 205:
- § 203. This section sets forth the specific obligations of the dealer at the time of return, to accept containers offered for return, and to return the deposits which he is holding. The proposal would impose a deposit--a form of security or collateral--to induce consumers to return empty containers. When the return occurs, the collateral must be returned in full. The returns must be accepted from "any person," a class larger than the class of the purchasers. This would permit the practice of group and charitable collections and returns. The consumer need not return the containers in person; the deposit will be paid to whomever makes the return.

§ 204. This section is designed to insure that the opportunities for return of containers to dealers are relatively convenient and available. Since the effectiveness of the regulation depends upon the consumer bringing his containers back, it is essential that the dealer be receptive. Obstacles to consumer returns should be minimized. The effect of § 204 is intended to be that return will be about as convenient as purchase, and that a consumer who comes to the dealer to purchase beverages can return empty containers at the same time and place.

§ 205. The regulation requires a dealer to accept only containers which he sold. A significant administrative problem arises in identifying containers. The entire system might break down in disputes over whether particular containers were, in fact, purchased from the dealer to whom they are offered. This section imposes a burden of proof--a very high burden--if the dealer refuses a container of the same size, brand and type as he sells. One result may be development by dealers of methods for marking containers. Such marking is not required by the regulation, as long as dealers who reject containers can show that the containers they reject were not sold by them.

ILLINOIS POLLUTION CONTROL BOARD
November 23, 1971

In the Matter of)
DU PAGE COUNTY SEWAGE) # R70-17
REGIONALIZATION)

PROPOSED FINAL DRAFT

CHAPTER IV: WATER POLLUTION
PART 11: Regional Sewage Treatment

1101. Preamble: The proliferation of numerous small sewage treatment plants in densely populated and rapidly developing DuPage County constitutes a severe and intolerable impediment to the correction of present water pollution and a continuing threat of additional pollution in the future. Not only do the higher unit costs of constructing and operating small plants waste finite dollars and therefore contribute to pollution; small plants cannot produce as satisfactory an effluent as can larger plants, because they cannot provide certain types of sophisticated treatment, because they cannot practically be adequately supervised or maintained, and because they cannot provide adequate standby treatment capacity to prevent pollution in the event of a malfunction. The establishment or continued operation of sewage treatment plants so small as to exhibit these deficiencies, in areas such as DuPage County where the population density is high enough to make larger plants economically feasible and indeed economically far more desirable, is contrary to the anti-pollution policy of the Environmental Protection Act. The nine service-area concept for DuPage County proposed by the Northeastern Illinois Planning Commission sets forth a reasonable geographical basis upon which to base a regionalization scheme in DuPage County and the Board endorses this concept in principle. All regionalization efforts made under this Chapter shall be directed toward a reduction in the number of sewage treatment facilities at the earliest reasonable deadline. A series of regional plants, well-operated and strategically located, will greatly minimize the pollutional load upon the DuPage County streams and assure conformance with the Environmental Protection Act.

In order to accomplish the above goals, the Board will appoint a Hearing Officer for each of the nine regions: he shall bring the various Parties in that region together; either jointly or individually, the Parties shall submit a Regional Plan to the Hearing Officer; the Hearing Officer shall conduct hearings on these submissions and make recommendations to the Board; based on these recommendations, the Board shall determine a program for each region, and, after publication, give final approval to a regional wastewater treatment program for DuPage County.

- 1102 Regions. The nine regions in DuPage County shall be as designated and approved by the Northeastern Illinois Planning Commission October 21, 1971. Such designation is depicted on the DuPage County map which is made a part of and attached to this Chapter. The two areas marked for the National Accelerator Laboratory site and the Bartlett-Hanover Park Wastewater Section shall for purposes of this regulation be considered as part of the northwest region indicated on the map.
- 1103 Parties. The County of DuPage, all municipalities, sanitary districts, and public utilities presently having responsibility for the treatment of sewage shall be Parties in these proceedings. The failure of any such Party to appear or participate shall bind that Party as to any proceedings or rulings made by the Hearing Officer of the Board under this Part.
- 1104 Hearing Officers. The Board shall designate a Hearing Officer for each of the nine regions. It shall be the responsibility of the Hearing Officer, as a representative of the Board, to bring together all the Parties within the particular region. The Hearing Officer shall have all such powers as are granted to hearing officers under Part II of the Procedural Rules and Regulations of the Board.
- (a) Upon appointment, the Hearing Officer shall notify all Parties within the region, the Environmental Protection Agency, and the Northeastern Illinois Planning Commission of his intent to hold public hearings on the implementation of this Part.
- (b) Within thirty (30) days of the effective date of this Part, the Hearing Officer shall schedule an informal meeting with all Parties within the particular region.

- (c) The Hearing Officer shall schedule such subsequent pre-hearing conferences, meetings, and public hearings as may be necessary to the preparation of a Regional Plan for the particular region.

1105 Submission of Regional Plan. On or before April 1, 1972, all Parties within a particular region shall file with the Environmental Protection Agency and with the Hearing Officer for that region a "Regional Plan" for the regionalization of sewage treatment facilities within that region. The Parties may submit the Regional Plan either jointly or individually. All Parties shall attempt to structure the Regional Plan in substantial accordance with the Regional Wastewater Plan approved by the Northeastern Illinois Planning Commission, October 21, 1971.

1106 Content of Regional Plan. The Regional Plan to be submitted under Section 1105 shall provide the following:

- (a) A "phase-in, phase-out" schedule for each of the plants which, inter alia, shall take into account the technical feasibility and economic reasonableness of continuing service at each of the affected plants;
- (b) A description of the location, capacity, treatment facilities, cost, and service area for the proposed plant(s) that is (are) to accept and treat the sewage from the geographical area involved;
- (c) A firm commitment by one or more responsible governmental agencies to construct and operate the proposed plants, together with a firm schedule for design, award of contracts, commencement of construction, full operation, and abandonment of obsolete plants;
- (d) A firm commitment by one or more responsible governmental agencies to construct and maintain any interceptor sewers made necessary by the Regional Plan;

- (d) A firm commitment by the affected governmental agencies for the financing of the necessary facilities, through taxation, user charges, revenue and general obligation bonds, special assessment, connection charges, loans, grants, contracts, or otherwise;
- (e) An attorney's opinion affirming and explaining the authority of the responsible governmental agencies to carry out their undertaking as described;
- (g) Assurance that the plan conforms with Rule 1105 of this Chapter and with all applicable regulations respecting air and water pollution and the disposal of solid waste;
- (h) Assurance as to what interim measures will be provided regarding sewage treatment, including water quality standards;
- (i) Assurances that such a Plan is consistent with County and regional comprehensive growth and land-use planning.

1107 Recommendations of Hearing Officer.

- (a) Upon receipt of the Regional Plan, the Hearing Officer shall schedule such further hearings as may be necessary in order for him to formulate his recommendations to the Board under this Chapter.
- (b) By July 1, 1972, the Hearing Officer in each region shall submit to the Board his recommendations as to how the Board should implement the regional concept in the particular region. The Hearing Officer's recommendation shall:
 - (1) Detail the phasing out of plants;
 - (2) designate plants as either interim, remote or regional facilities;
 - (3) designate the governmental agency(s) which will assume responsibility for sewage treatment;

- (4) evaluate the need for extensions to interceptor sewer lines before regionalization can be realized;
 - (5) list facilities which must be constructed or expanded; and to what capacity at what time, and;
 - (6) state any additional findings of facts or conclusions of law which may be necessary for the Board to evaluate the Regional Plans and recommendations of the Hearing Officer, and to make a decision regarding the program to be adopted for any one region, under Section 1108, herein.
- (c) In formulating his recommendations to the Board, the Hearing Officer shall consider:
- (1) The economic reasonableness and technical feasibility of the various regional alternatives;
 - (2) the assurances of service offered by the Parties, including their willingness to assume a greater responsibility for sewage treatment;
 - (3) the need for future service in areas presently unsewered;
 - (4) the need for continued service by smaller plants in areas remote from regional treatment facilities.
- (d) A transcript of the proceedings and the original exhibits shall be transmitted to the Board.

1108 Issuance of Regional Program. After receipt of the recommendations from the Hearing Officer, the Board shall issue a Regional Program for each of the nine regions, which Program shall provide specific findings as to each region as to how regionalization will be accomplished. This Regional Program, inter alia, shall include the following:

- (a) Designate those plants to remain in service, to be constructed, or expanded as regional plants

- and those plants to be designated as interim facilities, with specific "phase-in, phase-out" dates where applicable;
- (b) Designate in each of the nine regions the governmental agency(s) responsible for sewage treatment;
 - (c) Delineate areas of future growth within DuPage County, making provision for regional sewage treatment plant expansion when necessary;
 - (d) Provide for a sufficient transport system under the control of a responsible governmental agency in order to carry sewage to the regional treatment plant;
 - (e) Evaluate the ability of each regional sewage treatment plant to handle its present and projected capacity consonant with predicted growth patterns within DuPage County;
 - (f) Provide that presently unserviced areas are guaranteed service on a reasonable cost basis and without the imposition of unreasonable conditions before hookup is allowed.
- 1109 Publication by the Board. Upon the issuance of a regional program by the Board, it shall give public notice in accordance with Board Procedural Rules 211 and 212.
- 1110 Public Notice. All proceedings held under this Part shall be public. Public notice shall be given of all proceedings in accordance with Board Procedural Rule 205.
- 1111 Unserviced Areas. The Hearing Officer and the Environmental Protection Agency shall assure that those areas presently unserviced by any sewers or sewage treatment facility have their interests fully considered in these proceedings.
- 1112 The Role of the Agency. The Environmental Protection Agency shall participate in each of the proceedings in the nine regions. Within thirty (30) days of the filing of a Regional Plan by Parties, the Agency shall file a stated written recommendation for each region and for each treatment plant.

- 1113 Future Construction. No permit shall be granted for the construction or operation of any additional sewage treatment plant in DuPage County, except for interim facilities in the event of a demonstrated emergency, that does not conform with the principles of the Regional Program described in Section 1108 of this Chapter, or that is of capacity so small as to create an insignificant risk of inadequate treatment, according to the policies expressed in Rule 1101 of this Chapter.
- 1114 Other Regulations Preserved. Nothing in this Part shall relieve any person from the obligation to comply in all respects with any existing or future regulations, including but not limited to the water quality standards and implementation plan for streams in DuPage County.



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TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

Chapter I: POLLUTION CONTROL BOARD

State of Illinois



Rules and Regulations

**This printing of Title 35: Environmental Protection,
Subtitle B: Air Pollution, Chapter I: Pollution Control Board
includes amendments through February 6, 1989**

CONTENTS

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

CHAPTER I: POLLUTION CONTROL BOARD

SUBCHAPTER a: PERMITS AND GENERAL PROVISIONS

PART 201 PERMITS AND GENERAL PROVISIONS

SUBPART A: DEFINITIONS

Section	
201.101	Other Definitions
201.102	Definitions
201.103	Abbreviations and Units
201.104	Incorporations by Reference

SUBPART B: GENERAL PROVISIONS

Section	
201.121	Existence of Permit No Defense
201.122	Proof of Emissions
201.123	Burden of Persuasion Regarding Exceptions
201.124	Annual Report
201.125	Severability
201.126	Repealer

SUBPART C: PROHIBITIONS

Section	
201.141	Prohibition of Air Pollution
201.142	Construction Permit Required
201.143	Operating Permits for New Sources
201.144	Operating Permits for Existing Sources
201.146	Exemptions from Permit Requirement
201.147	Former Permits
201.148	Operation Without Compliance Program and Project Completion Schedule
201.149	Operation During Malfunction, Breakdown or Startups
201.150	Circumvention
201.151	Design of Effluent Exhaust Systems

SUBPART D: PERMIT APPLICATIONS AND REVIEW PROCESS

Section	
201.152	Contents of Application for Construction Permit
201.153	Incomplete Applications
201.154	Signatures
201.155	Standards for Issuance
201.156	Conditions
201.157	Contents of Application for Operating Permit
201.158	Incomplete Applications
201.159	Signatures
201.160	Standards for Issuance
201.161	Conditions
201.162	Duration
201.163	Joint Construction and Operating Permits
201.164	Design Criteria
201.165	Hearings

SUBPART F: RENEWAL, REVOCATION, REVISION AND APPEAL

Section	
201.207	Revocation
201.209	Revisions to Permits
201.210	Appeals from Conditions

SUBPART H: COMPLIANCE PROGRAMS AND PROJECT COMPLETION SCHEDULES

Section	
201.241	Contents of Compliance Program
201.242	Contents of Project Completion Schedule
201.243	Standards for Approval
201.244	Revisions
201.245	Effects of Approval
201.246	Records and Reports
201.247	Submission and Approval Dates

SUBPART I: MALFUNCTIONS, BREAKDOWNS OR STARTUPS

Section	
201.261	Contents of Request for Permission to Operate During a Malfunction, Breakdown or Startup
201.262	Standards for Granting Permission to Operate During a Malfunction, Breakdown or Startup
201.263	Records and Reports
201.264	Continued Operation or Startup Prior to Granting of Operating Permit
201.265	Effect of Granting of Permission to Operate During a Malfunction, Breakdown or Startup

SUBPART J: MONITORING AND TESTING

Section	
201.281	Permit Monitoring Equipment Requirements
201.282	Testing
201.283	Records and Reports

SUBPART K: RECORDS AND REPORTS

Section	
201.301	Records
201.302	Reports

SUBPART L: CONTINUOUS MONITORING

Section	
201.401	Continuous Monitoring Requirements
201.402	Alternative Monitoring
201.403	Exempt Sources
201.404	Monitoring System Malfunction
201.405	Excess Emission Reporting
201.406	Data Reduction
201.407	Retention of Information
201.408	Compliance Schedules

PART 202
ALTERNATIVE CONTROL STRATEGIES

SUBPART A: GENERAL PROVISIONS

Section	
202.101	Definitions
202.104	Actual Emissions
202.107	Allowable Emissions
202.110	Alternative Control Strategy (ACS)
202.113	Chapter
202.116	Emission Baseline
202.119	Multi-person ACS
202.122	Potential to Emit
202.125	Abbreviations
202.140	Scope
202.142	Severability

SUBPART B: PERMIT APPLICATION

Section	
202.201	Emission Baseline for Alternative Control Strategies
202.210	Permit Application Information
202.211	Analysis of Emissions
202.212	Analysis of Environmental Quality
202.213	Analysis of Methods of Assuring Compliance

SUBPART C: PERMIT CONDITIONS AND ISSUANCE

Section	
202.301	Permit Conditions
202.302	Records and Reports
202.303	Monitoring and Testing
202.304	Compliance Dates
202.305	Public Participation
202.306	Standards for Issuance
202.307	Notification to USEPA

SUBPART D: PERMIT DURATION, REVISION
AND RENEWAL

Section	
202.401	Duration
202.402	Revision
202.403	Renewal

SUBPART E: ALTERNATIVE CONTROL STRATEGIES
INVOLVING MORE THAN ONE PERSON

Section	
202.501	Applicability
202.502	Permit Application
202.503	Duration
202.504	Permit Conditions
202.505	Records and Reports
202.506	Revocation
202.507	Termination

PART 203
MAJOR STATIONARY SOURCES CONSTRUCTION
AND MODIFICATION

SUBPART A: GENERAL PROVISIONS

Section	
203.101	Definitions
203.103	Actual Construction
203.104	Actual Emissions
203.107	Allowable Emissions
203.110	Available Growth Margin

203.112	Building, Structure and Facility
203.113	Commence
203.116	Construction
203.117	Dispersion Enhancement Techniques
203.119	Emission Baseline
203.122	Emission Offset
203.123	Emissions Unit
203.124	Fugitive Emissions
203.125	Installation
203.126	LAER
203.127	Nonattainment Area
203.128	Potential to Emit
203.131	Reasonable Further Progress
203.134	Secondary Emissions
203.136	Stationary Source
203.145	Volatile Organic Compound
203.150	Public Participation
203.155	Severability (Repealed)

SUBPART B: MAJOR STATIONARY
SOURCES IN NONATTAINMENT AREAS

Section	
203.201	Prohibition
203.202	Coordination with Permit Requirement and Application Pursuant to 35 III. Adm. Code 201
203.203	Construction Permit Requirement and Application
203.204	Duration of Construction Permit (Repealed)
203.205	Effect of Permits
203.206	Major Stationary Source
203.207	Major Modification of a Source
203.208	Net Emission Determination
203.209	Significant Emissions Determination
203.210	Relaxation of a Source-Specific Limitation
203.211	Permit Exemption Based on Fugitive Emissions

SUBPART C: REQUIREMENTS FOR MAJOR STATIONARY
SOURCES IN NONATTAINMENT AREAS

Section	
203.301	Lowest Achievable Emission Rate
203.302	Maintenance of Reasonable Further Progress and Emission Offsets
203.303	Baseline and Emission Offsets Determination
203.304	Exemptions from Emissions Offset Requirement (Repealed)
203.305	Compliance by Existing Sources
203.306	Analysis of Alternatives

SUBPART E: OPERATION OF A MAJOR STATIONARY
SOURCE OR MAJOR MODIFICATION

Section	
203.601	Lowest Achievable Emission Rate Compliance Requirement
203.602	Emission Offset Maintenance Requirement
203.603	Ambient Monitoring Requirement (Repealed)

SUBPART G: GENERAL MAINTENANCE OF
EMISSION OFFSETS

Section	
203.701	General Maintenance of Emission Offsets

**SUBCHAPTER C: EMISSION STANDARDS AND
LIMITATIONS FOR STATIONARY SOURCES**

**PART 211
DEFINITIONS AND GENERAL PROVISIONS**

SUBPART A: GENERAL PROVISIONS

Section	
211.101	Incorporations by Reference
211.102	Abbreviations and Units

SUBPART B: DEFINITIONS

Section	
211.121	Other Definitions
211.122	Definitions

**PART 212
VISIBLE AND PARTICULATE MATTER EMISSIONS**

SUBPART A: GENERAL

Section	
212.100	Scope and Organization
212.110	Measurement Methods
212.111	Abbreviations and Units
212.112	Definitions
212.113	Incorporations by Reference

SUBPART B: VISIBLE EMISSIONS

Section	
212.121	Opacity Standards
212.122	Limitations for Certain New Sources
212.123	Limitations for All Other Sources
212.124	Exceptions
212.125	Determination of Violations
212.126	Adjusted Opacity Standards Procedures

**SUBPART D: PARTICULATE MATTER EMISSIONS
FROM INCINERATORS**

Section	
212.181	Limitations for Incinerators
212.182	Aqueous Waste Incinerators
212.183	Certain Wood Waste Incinerators
212.184	Explosive Waste Incinerators
212.185	Continuous Automatic Slaking Animal Pathological Waste Incinerators

**SUBPART E: PARTICULATE MATTER EMISSIONS FROM
FUEL COMBUSTION EMISSION SOURCES**

Section	
212.201	Existing Sources Using Solid Fuel Exclusively Located in the Chicago Area
212.202	Existing Sources Using Solid Fuel Exclusively Located Outside the Chicago Area
212.203	Existing Controlled Sources Using Solid Fuel Exclusively
212.204	New Sources Using Solid Fuel Exclusively
212.205	Existing Coal-fired Industrial Boilers Equipped with Flue Gas Desulfurization Systems
212.206	Sources Using Liquid Fuel Exclusively
212.207	Sources Using More Than One Type of Fuel

212.208	Aggregation of Existing Sources
212.209	Village of Winnetka Generating Station

SUBPART K: FUGITIVE PARTICULATE MATTER

Section	
212.301	Fugitive Particulate Matter
212.302	Geographical Areas of Application
212.304	Storage Piles
212.305	Conveyor Loading Operations
212.306	Traffic Areas
212.307	Materials Collected by Pollution Control Equipment
212.308	Spraying or Choke-feeding Required
212.309	Operating Program
212.310	Minimum Operating Program
212.312	Amendment to Operating Program
212.313	Emission Standard for Particulate Collection Equipment
212.314	Exception for Excess Wind Speed
212.315	Covering for Vehicles

**SUBPART L: PARTICULATE MATTER EMISSIONS
FROM PROCESS EMISSION SOURCES**

Section	
212.321	New Process Sources
212.322	Existing Process Sources
212.323	Stock Piles

SUBPART N: FOOD MANUFACTURING

Section	
212.361	Corn Wet Milling Processes

**SUBPART O: PETROLEUM REFINING, PETROCHEMICAL
AND CHEMICAL MANUFACTURING**

Section	
212.381	Catalyst Regenerators of Fluidized Catalytic Converters

**SUBPART Q: STONE, CLAY, GLASS AND
CONCRETE MANUFACTURING**

Section	
212.421	New Portland Cement Processes
212.422	Portland Cement Manufacturing Processes

**SUBPART R: PRIMARY AND FABRICATED METAL
PRODUCTS AND MACHINERY MANUFACTURE**

Section	
212.441	Steel Manufacturing Processes
212.442	Beehive Coke Ovens
212.443	By-Product Coke Plants
212.444	Sinter Processes
212.445	Blast Furnace Cast Houses
212.446	Basic Oxygen Furnaces
212.447	Hot Metal Desulfurization Not Located in the BOF
212.448	Electric Arc Furnaces
212.449	Argon-Oxygen Decarburization Vessels
212.450	Liquid Steel Charging
212.451	Hot Scarfing Machines
212.452	Measurement Methods
212.453	Highlines on Steel Mills
212.456	Certain Small Foundries
212.457	Certain Small Iron-melting Air Furnaces

SUBPART S: AGRICULTURE

Section	
212.461	Grain Handling and Drying in General
212.462	Grain Handling Operations
212.463	Grain Drying Operations

SUBPART T: CONSTRUCTION AND WOOD PRODUCTS

Section	
212.681	Grinding, Woodworking, Sandblasting and Shotblasting

**PART 214
SULFUR LIMITATIONS****SUBPART A: GENERAL PROVISIONS**

Section	
214.100	Scope and Organization
214.101	Measurement Methods
214.102	Abbreviations and Units
214.103	Definitions
214.104	Incorporations by Reference

**SUBPART B: NEW FUEL COMBUSTION
EMISSION SOURCES**

Section	
214.120	Scope
214.121	Large Sources
214.122	Small Sources

**SUBPART C: EXISTING SOLID FUEL
COMBUSTION EMISSION SOURCES**

Section	
214.140	Scope
214.141	Sources Located in Metropolitan Areas
214.142	Small Sources Located Outside Metropolitan Areas
214.143	Large Sources Located Outside Metropolitan Areas

**SUBPART D: EXISTING LIQUID OR MIXED
FUEL COMBUSTION EMISSION SOURCES**

Section	
214.161	Liquid Fuel Burned Exclusively
214.162	Combination of Fuels

**SUBPART E: AGGREGATION OF SOURCES
OUTSIDE METROPOLITAN AREAS**

Section	
214.181	Dispersion Enhancement Techniques
214.182	Prohibition
214.183	General Formula
214.184	Special Formula
214.185	Alternative Emission Rate
214.186	New Operating Permits

**SUBPART F: ALTERNATIVE STANDARDS FOR
SOURCES INSIDE METROPOLITAN AREAS**

Section	
214.201	Alternative Standards for Sources in Metropolitan Areas
214.202	Dispersion Enhancement Techniques

SUBPART K: PROCESS EMISSION SOURCES

Section	
214.300	Scope
214.301	General Limitation
214.302	Exception for Air Pollution Control Equipment
214.303	Use of Sulfuric Acid
214.304	Fuel-Burning Process Emission Source

**SUBPART O: PETROLEUM REFINING, PETROCHEMICAL
AND CHEMICAL MANUFACTURING**

Section	
214.380	Scope
214.381	Sulfuric Acid Manufacturing
214.382	Petroleum and Petrochemical Processes
214.383	Chemical Manufacturing
214.384	Sulfate and Sulfite Manufacturing

**SUBPART P: STONE, CLAY, GLASS
AND CONCRETE PRODUCTS**

Section	
214.400	Scope
214.401	Glass Melting and Heat Treating
214.402	Lime Kilns

**SUBPART Q: PRIMARY AND SECONDARY
METAL MANUFACTURING**

Section	
214.420	Scope
214.421	Combination of Fuels at Steel Mills in Metropolitan Areas
214.422	Secondary Lead Smelting in Metropolitan Areas
214.423	Slab Reheat Furnaces in St. Louis Area

SUBPART V: ELECTRIC POWER PLANTS

Section	
214.521	Winnelka Power Plant

SUBPART X: UTILITIES

Section	
214.560	Scope
214.561	E.D. Edwards Electric Generating Station
214.562	Coffeen Generating Station

**PART 215
ORGANIC MATERIAL EMISSION STANDARDS
AND LIMITATIONS****SUBPART A: GENERAL PROVISIONS**

Section	
215.100	Introduction
215.101	Clean-up and Disposal Operations
215.102	Testing Methods
215.103	Abbreviations and Conversion Factors
215.104	Definitions
215.105	Incorporations by Reference
215.106	Afterburners
215.107	Determination of Applicability

SUBPART B: ORGANIC EMISSIONS FROM STORAGE AND LOADING OPERATIONS

Section	
215.121	Storage Containers
215.122	Loading Operations
215.123	Petroleum Liquid Storage Tanks
215.124	External Floating Roofs
215.125	Compliance Dates and Geographical Areas
215.126	Compliance Plan

SUBPART C: ORGANIC EMISSIONS FROM MISCELLANEOUS EQUIPMENT

Section	
215.141	Separation Operations
215.142	Pumps and Compressors
215.143	Vapor Blowdown
215.144	Safety Relief Valves

SUBPART E: SOLVENT CLEANING

Section	
215.181	Solvent Cleaning in General
215.182	Cold Cleaning
215.183	Open Top Vapor Degreasing
215.184	Conveyorized Degreasing
215.185	Compliance Plan

SUBPART F: COATING OPERATIONS

Section	
215.202	Compliance Schedules
215.204	Emission Limitations for Manufacturing Plants
215.205	Alternative Emission Limitations
215.206	Exemptions from Emission Limitations
215.207	Compliance by Aggregation of Emission Sources
215.208	Testing Methods for Solvent Content
215.209	Exemption from General Rule on Use of Organic Material
215.210	Alternative Compliance Schedule
215.211	Compliance Dates and Geographical Areas
215.212	Compliance Plan
215.213	Special Requirements for Compliance Plan

SUBPART H: SPECIAL LIMITATIONS FOR SOURCES IN MAJOR URBANIZED AREAS WHICH ARE NONATTAINMENT FOR OZONE

Section	
215.240	Applicability
215.241	External Floating Roofs
215.245	Flexographic and Rotogravure Printing
215.249	Compliance Dates

SUBPART I: ADJUSTED RACT EMISSIONS LIMITATIONS

Section	
215.260	Applicability
215.261	Petition
215.263	Public Hearing
215.264	Board Action
215.267	Agency Petition

SUBPART K: USE OF ORGANIC MATERIAL

Section	
215.301	Use of Organic Material
215.302	Alternative Standard
215.303	Fuel Combustion Emission Sources
215.304	Operations with Compliance Program
215.305	Viscose Exemption (Repealed)

SUBPART N: VEGETABLE OIL PROCESSING

Section	
215.340	Hexane Extraction Soybean Crushing
215.342	Hexane Extraction Corn Oil Processing
215.344	Recordkeeping for Vegetable Oil Processes
215.345	Compliance Determination
215.346	Compliance Dates and Geographical Areas
215.347	Compliance Plan

SUBPART P: PRINTING AND PUBLISHING

Section	
215.401	Flexographic and Rotogravure Printing
215.402	Exemptions
215.403	Applicability of Subpart K
215.404	Testing and Monitoring
215.405	Compliance Dates and Geographical Areas
215.406	Alternative Compliance Plan
215.407	Compliance Plan
215.408	Heatset Web-Offset Lithographic Printing

SUBPART Q: LEAKS FROM SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING EQUIPMENT

Section	
215.420	Applicability
215.421	General Requirements
215.422	Inspection Program Plan for Leaks
215.423	Inspection Program for Leaks
215.424	Repairing Leaks
215.425	Recordkeeping for Leaks
215.426	Reporting for Leaks
215.427	Alternative Program for Leaks
215.428	Compliance Dates
215.429	Compliance Plan
215.430	General Requirements
215.431	Inspection Program Plan for Leaks
215.432	Inspection Program for Leaks
215.433	Repairing Leaks
215.434	Recordkeeping for Leaks
215.435	Report for Leaks
215.436	Alternative Program for Leaks
215.437	Open-Ended Valves
215.438	Compliance Plan

SUBPART R: PETROLEUM REFINING AND RELATED INDUSTRIES; ASPHALT MATERIALS

Section	
215.441	Petroleum Refinery Waste Gas Disposal
215.442	Vacuum Producing Systems
215.443	Wastewater (Oil/Water) Separator
215.444	Process Unit Turnarounds
215.445	Leaks: General Requirements
215.446	Monitoring Program Plan for Leaks

215.447 Monitoring Program for Leaks
 215.448 Recordkeeping for Leaks
 215.449 Reporting for Leaks
 215.450 Alternative Program for Leaks
 215.451 Sealing Device Requirements
 215.452 Compliance Schedule for Leaks
 215.453 Compliance Dates and Geographical Areas

SUBPART S: RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS

Section
 215.461 Manufacture of Pneumatic Rubber Tires
 215.462 Green Tire Spraying Operations
 215.463 Alternative Emission Reduction Systems
 215.464 Testing and Monitoring
 215.465 Compliance Dates and Geographical Areas
 215.466 Compliance Plan

SUBPART T: PHARMACEUTICAL MANUFACTURING

Section
 215.480 Applicability of Subpart T
 215.481 Control of Reactors, Distillation Units, Crystallizers, Centrifuges and Vacuum Dryers
 215.482 Control of Air Dryers, Production Equipment Exhaust Systems and Filters
 215.483 Material Storage and Transfer
 215.484 In-Process Tanks
 215.485 Leaks
 215.486 Other Emission Sources
 215.487 Testing
 215.488 Monitors for Air Pollution Control Equipment
 215.489 Compliance Schedule

SUBPART U: COKE MANUFACTURE AND BY-PRODUCT RECOVERY

Section
 215.500 Exception
 215.510 Coke By-Product Recovery Plants
 215.512 Coke By-Product Recovery Plant Leaks
 215.513 Inspection Program
 215.514 Recordkeeping Requirements
 215.515 Reporting Requirements
 215.516 Compliance Dates
 215.517 Compliance Plan

SUBPART V: AIR OXIDATION PROCESSES

Section
 215.520 Applicability
 215.521 Definitions
 215.525 Emission Limitations for Air Oxidation Processes
 215.526 Testing and Monitoring
 215.527 Compliance Date

SUBPART W: AGRICULTURE

Section
 215.541 Pesticide Exception

SUBPART X: CONSTRUCTION

Section
 215.561 Architectural Coatings
 215.562 Paving Operations
 215.563 Cutback Asphalt

SUBPART Y: GASOLINE DISTRIBUTION

Section
 215.581 Bulk Gasoline Plants
 215.582 Bulk Gasoline Terminals
 215.583 Gasoline Dispensing Facilities
 215.584 Gasoline Delivery Vessels

SUBPART Z: DRY CLEANERS

Section
 215.601 Perchloroethylene Dry Cleaners
 215.602 Exemptions
 215.603 Testing and Monitoring
 215.604 Compliance Dates and Geographical Areas
 215.605 Compliance Plan
 215.606 Exception to Compliance Plan
 215.607 Standards for Petroleum Solvent Dry Cleaners
 215.608 Operating Practices for Petroleum Solvent Dry Cleaners
 215.609 Program for Inspection and Repair of Leaks
 215.610 Testing and Monitoring
 215.611 Exemption for Petroleum Solvent Dry Cleaners
 215.612 Compliance Dates and Geographical Areas
 215.613 Compliance Plan

SUBPART AA: PAINT AND INK MANUFACTURING

Section
 215.620 Applicability
 215.621 Exemption for Waterbase and Heatset Offset Ink
 215.623 Permit Conditions
 215.624 Open-top Mills, Tanks, Vats or Vessel
 215.625 Grinding Mills
 215.628 Leaks
 215.630 Clean Up
 215.636 Compliance Date

SUBPART BB: POLYSTYRENE PLANTS

Section
 215.875 Applicability of Subpart BB
 215.877 Emissions Limitation at Polystyrene Plants
 215.879 Compliance Date
 215.881 Compliance Plan
 215.883 Special Requirements for Compliance Plan
 215.886 Testing and Monitoring

SUBPART PP: MISCELLANEOUS FABRICATED PRODUCT MANUFACTURING PROCESSES

Section
 215.920 Applicability
 215.923 Permit Conditions
 215.926 Control Requirements

SUBPART QQ: MISCELLANEOUS FORMULATION MANUFACTURING PROCESSES

Section
 215.940 Applicability
 215.943 Permit Conditions
 215.946 Control Requirements

**SUBPART RR: MISCELLANEOUS ORGANIC CHEMICAL
MANUFACTURING PROCESSES**

Section
215.960 Applicability
215.963 Permit Conditions
215.966 Control Requirements

**PART 216
CARBON MONOXIDE EMISSIONS**

SUBPART A: GENERAL PROVISIONS

Section
216.100 Scope and Organization
216.101 Measurement Methods
216.102 Abbreviations and Conversion Factors
216.103 Definitions
216.104 Incorporations by Reference

SUBPART B: FUEL COMBUSTION EMISSION SOURCES

Section
216.121 Fuel Combustion Emission Sources
216.122 Exception, Midwest Grain Products

SUBPART C: INCINERATORS

Section
216.141 Incinerators
216.142 Exceptions

**SUBPART N: PETROLEUM REFINING AND
CHEMICAL MANUFACTURE**

Section
216.361 Petroleum and Petrochemical Processes
216.362 Polybasic Organic Acid Partial
 Oxidation Manufacturing Processes

**SUBPART O: PRIMARY AND FABRICATED METAL
PRODUCTS**

Section
216.381 Cupolas

**PART 217
NITROGEN OXIDES EMISSIONS**

SUBPART A: GENERAL PROVISIONS

Section
217.100 Scope and Organization
217.101 Measurement Methods
217.102 Abbreviations and Units
217.103 Definitions
217.104 Incorporations by Reference

**SUBPART B: NEW FUEL COMBUSTION
EMISSION SOURCES**

Section
217.121 New Emission Sources

**SUBPART C: EXISTING FUEL COMBUSTION
EMISSION SOURCES**

Section
217.141 Existing Emission Sources in Major
 Metropolitan Areas

SUBPART K: PROCESS EMISSION SOURCES

Section
217.301 Industrial Processes

SUBPART D: CHEMICAL MANUFACTURE

Section
217.381 Nitric Acid Manufacturing Processes

SUBPART V: ELECTRIC POWER GENERATION

Section
217.521 Lake of Egypt Power Plant

**PART 228
ASBESTOS**

SUBPART A: GENERAL PROVISIONS

Section
228.101 Authority
228.102 Policy
228.103 Definitions
228.104 Incorporations by Reference

SUBPART B: GENERAL REQUIREMENTS

Section
228.121 Prohibition
228.123 Permit for Manufacture

**SUBPART C: CONSTRUCTION, ALTERATION
AND REPAIR OF STRUCTURE**

Section
228.131 Spray Asbestos Prohibited
228.132 Non-asbestos Spray Insulation
228.133 Enclosure for Asbestos Construction
228.134 No Visible Emission
228.135 Preclude Exposure to Circulating Air

SUBPART D: DEMOLITION

Section
228.141 Necessary and Practicable Safeguards

SUBPART E: MANUFACTURING

Section
228.151 Emission Standards; Sampling and
 Counting Procedures
228.152 Venting of all Emissions to Central
 Sources
228.153 Inspection
228.154 Monitoring and Reporting
228.155 Process Wastewater Effluent Criteria
228.156 Sludge Disposal
228.157 Transportation of Asbestos-containing
 Products
228.158 No Visible Emission

SUBPART F: LOCAL ENFORCEMENT

Section
228.161 Obligation to Enforce

SUBCHAPTER e: PEREMPTORY RULES

**PART 230
NEW SOURCE PERFORMANCE STANDARDS**

SUBPART A: GENERAL PROVISIONS

Section
230.110 General Provisions

SUBPART D: STEAM GENERATORS

Section
230.140 Fossil-Fuel Fired Steam Generators
for which Construction is Commenced
after August 17, 1971
230.141 Electric Utility Steam Generating
Units for which Construction is
Commenced after September 18, 1978

SUBPART E: INCINERATORS

Section
230.150 Incinerators

SUBPART F: PORTLAND CEMENT PLANTS

Section
230.160 Portland Cement Plants

SUBPART G: NITRIC ACID PLANTS

Section
230.170 Nitric Acid Plants

SUBPART H: SULFURIC ACID PLANTS

Section
230.180 Sulfuric Acid Plants

SUBPART I: ASPHALT CONCRETE PLANTS

Section
230.190 Asphalt Concrete Plants

SUBPART J: PETROLEUM REFINERIES

Section
230.200 Petroleum Refineries

**SUBPART K: STORAGE VESSELS FOR
PETROLEUM LIQUIDS**

Section
230.210 Storage Vessels for Petroleum Liquids
Constructed after June 11, 1973 and
Prior to May 19, 1978
230.211 Storage Vessels for Petroleum Liquids
Constructed after May 18, 1978
230.212 Volatile Organic Storage Vessels
(Including Petroleum Liquid Storage
Vessels) for which Construct,
Reconstruction, or Modification
Commenced after July 23, 1984

SUBPART L: SECONDARY LEAD SMELTERS

Section
230.220 Secondary Lead Smelters

**SUBPART M: SECONDARY BRASS AND BRONZE
INGOT PRODUCTION PLANTS**

Section
230.230 Secondary Brass and Bronze Ingot
Production Plants

SUBPART N: IRON AND STEEL PLANTS

Section
230.240 Iron and Steel Plants

SUBPART O: SEWAGE TREATMENT PLANTS

Section
230.250 Sewage Treatment Plants

SUBPART P: PRIMARY COPPER SMELTERS

Section
230.260 Primary Copper Smelters

SUBPART Q: PRIMARY ZINC SMELTERS

Section
230.270 Primary Zinc Smelters

SUBPART R: PRIMARY LEAD SMELTERS

Section
230.280 Primary Lead Smelters

**SUBPART S: PRIMARY ALUMINUM
REDUCTION PLANTS**

Section
230.290 Primary Aluminum Reduction Plants

**SUBPART T: THE PHOSPHATE FERTILIZER INDUSTRY:
WET-PROCESS PHOSPHORIC ACID PLANTS**

Section
230.300 Phosphate Fertilizer Industry:
Wet-Process Phosphoric Acid Plants

**SUBPART U: THE PHOSPHATE FERTILIZER INDUSTRY:
SUPERPHOSPHORIC ACID PLANTS**

Section
230.310 Phosphate Fertilizer Industry:
Superphosphoric Acid Plants

**SUBPART V: THE PHOSPHATE FERTILIZER INDUSTRY:
DIAMMONIUM PHOSPHATE PLANTS**

Section
230.320 Phosphate Fertilizer Industry:
Diammonium Phosphate Plants

**SUBPART W: THE PHOSPHATE FERTILIZER INDUSTRY:
TRIPLE SUPERPHOSPHATE PLANTS**

Section
230.330 Phosphate Fertilizer Industry:
Triple Superphosphate Plants

**SUBPART X: THE PHOSPHATE FERTILIZER INDUSTRY:
GRANULAR TRIPLE SUPERPHOSPHATE
STORAGE FACILITIES**

Section
230.340 Phosphate Fertilizer Industry:
Granular Triple Superphosphate
Storage Facilities

SUBPART Y: COAL PREPARATION PLANTS

Section
230.350 Coal Preparation Plants

**SUBPART Z: FERROALLOY PRODUCTION
FACILITIES**

Section
230.360 Ferroalloy Production Facilities

**SUBPART AA: STEEL PLANTS: ELECTRIC ARC
FURNACES**

Section
230.370 Steel Plants: Electric Arc Furnaces

**SUBPART AAA: STEEL PLANTS - ELECTRIC ARC
FURNACES AND ARGON-OXYGEN DECARBURIZATION
VESSELS CONSTRUCTED AFTER AUGUST 17, 1983**

Section
230.371 Steel Plants - Electric Arc Furnaces
and Argon-Oxygen Decarburization
Vessels Constructed After August 17,
1983

SUBPART BB: KRAFT PULP MILLS

Section
230.380 Kraft Pulp Mills

SUBPART CC: GLASS MANUFACTURING PLANTS

Section
230.390 Glass Manufacturing Plants

SUBPART DD: GRAIN ELEVATORS

Section
230.400 Grain Elevators

**SUBPART EE: SURFACE COATING OF
METAL FURNITURE**

Section
230.410 Surface Coating of Metal Furniture

SUBPART GG: STATIONARY GAS TURBINES

Section
230.430 Stationary Gas Turbines

SUBPART HH: LIME MANUFACTURING PLANTS

Section
230.440 Lime Manufacturing Plants

**SUBPART KK: LEAD-ACID BATTERY
MANUFACTURING PLANTS**

Section
230.470 Lead-Acid Battery Manufacturing Plants

**SUBPART LL: METALLIC MINERAL
PROCESSING PLANTS**

Section
230.480 Metallic Mineral Processing Plants

**SUBPART MM: AUTOMOBILE AND LIGHT-DUTY TRUCK
SURFACE COATING OPERATIONS**

Section
230.490 Automobile and Light-Duty Truck
Surface Coating Operations

SUBPART NN: PHOSPHATE ROCK PLANTS

Section
230.500 Phosphate Rock Plants

SUBPART PP: AMMONIUM SULFATE MANUFACTURE

Section
230.520 Ammonium Sulfate Manufacture

**SUBPART QQ: GRAPHIC ARTS INDUSTRY:
PUBLICATION ROTOGRAVURE PRINTING**

Section
230.530 Graphic Arts Industry: Publication
Rotogravure Printing

**SUBPART RR: PRESSURE SENSITIVE TAPE
AND LABEL SURFACE COATING OPERATIONS**

Section
230.540 Pressure Sensitive Tape and Label
Surface Coating Operations

**SUBPART SS: INDUSTRIAL SURFACE COATING:
LARGE APPLIANCES**

Section
230.550 Industrial Surface Coating: Large
Appliances

**SUBPART TT: METAL COIL SURFACE
COATING OPERATIONS**

Section
230.560 Metal Coil Surface Coating Operations

**SUBPART UU: ASPHALT PROCESSING AND
ASPHALT ROOFING MANUFACTURE**

Section
230.570 Asphalt Processing and Asphalt
Roofing Manufacture

**SUBPART VV: EQUIPMENT LEAKS OF VOC IN THE
SYNTHETIC ORGANIC CHEMICALS
MANUFACTURING INDUSTRY**

Section
230.580 Equipment Leaks of VOC in the
Synthetic Organic Chemicals
Manufacturing Industry

**SUBPART WW: BEVERAGE CAN SURFACE
COATING INDUSTRY**

Section
230.590 Beverage Can Surface Coating Industry

SUBPART XX: BULK GASOLINE TERMINALS

Section
230.600 Bulk Gasoline Terminals

SUBPART FFF: FLEXIBLE VINYL AND URETHANE COATING AND PRINTING

Section
230.680 Flexible Vinyl and Urethane Coating and Printing

SUBPART GGG: EQUIPMENT LEAKS OF VOC IN PETROLEUM REFINERIES

Section
230.690 Equipment Leaks of VOC in Petroleum Refineries

SUBPART HHH: SYNTHETIC FIBER PRODUCTION FACILITIES

Section
230.700 Synthetic Fiber Production Facilities

SUBPART KKK: EQUIPMENT LEAKS OF VOC FROM ONSHORE NATURAL GAS PROCESSING PLANTS

Section
230.730 Equipment Leaks of VOC from Onshore Natural Gas Processing Plants

SUBPART LLL: ONSHORE NATURAL GAS PROCESSING; SO₂ EMISSIONS

Section
230.740 Onshore Natural Gas Processing; SO₂ Emissions

SUBPART OOO: NONMETALLIC MINERAL PROCESSING PLANTS

Section
230.770 Nonmetallic Mineral Processing Plants

SUBPART PPP: WOOL FIBERGLASS INSULATION MANUFACTURING PLANTS

Section
230.780 Wool Fiberglass Insulation Manufacturing Plants

**PART 231
HAZARDOUS AIR POLLUTANTS**

SUBPART A: GENERAL PROVISIONS

Section
231.110 General Provisions

SUBPART B: ASBESTOS

Section
231.120 Emission Standard for Asbestos (Renumbered)

SUBPART B: RADON-222 EMISSIONS FROM UNDERGROUND URANIUM MINES

Section
231.122 Radon-222 Emissions from Underground Uranium Mines

SUBPART C: BERYLLIUM

Section
231.130 Emission Standard for Beryllium

SUBPART D: BERYLLIUM ROCKET MOTOR FIRING

Section
231.140 Emission Standard for Beryllium Rocket Motor Firing

SUBPART E: MERCURY

Section
231.150 Emission Standard for Mercury

SUBPART F: VINYL CHLORIDE

Section
231.160 Emission Standard for Vinyl Chloride

SUBPART H: RADIONUCLIDE EMISSIONS FROM DEPARTMENT OF ENERGY (DOE) FACILITIES

Section
231.180 Radionuclide Emissions from Department of Energy (DOE) Facilities

SUBPART I: RADIONUCLIDE EMISSIONS FROM FACILITIES LICENSED BY THE NUCLEAR REGULATORY COMMISSION (NRC) AND FEDERAL FACILITIES NOT COVERED BY 35 U.S.C. 231.180

Section
231.190 Radionuclide Emissions from Facilities Licensed by the Nuclear Regulatory Commission (NRC) and Federal Facilities Not Covered by 35 U.S.C. 231.180

SUBPART J: EQUIPMENT LEAKS (FUGITIVE EMISSION SOURCES) OF BENZENE

Section
231.200 Equipment Leaks (Fugitive Emission Sources) of Benzene

SUBPART K: RADIONUCLIDE EMISSIONS FROM ELEMENTAL PHOSPHORUS PLANTS

Section
231.210 Radionuclide Emissions from Elemental Phosphorus Plants

SUBPART M: ASBESTOS

Section
231.230 Emission Standard for Asbestos

**SUBPART V: EQUIPMENT LEAKS (FUGITIVE
EMISSION SOURCES)**

Section
231.320 Equipment Leaks (Fugitive Emission
Sources)

SUBCHAPTER 1: OPEN BURNING

**PART 237
OPEN BURNING**

SUBPART A: GENERAL PROVISIONS

Section
237.101 Definitions
237.102 Prohibitions
237.103 Explosive Waste
237.110 Local Enforcement
237.120 Exemptions
237.130 Freeport Air Curtain Destructor

SUBPART B: PERMITS

Section
237.201 Available Permits
237.202 Permit Application
237.203 Permit Conditions
237.204 Standards of Issuance
237.205 Duration and Renewal
237.206 Revision
237.207 Revocation

**SUBCHAPTER K: EMISSION STANDARDS AND
LIMITATIONS FOR MOBILE SOURCES**

**PART 240
MOBILE SOURCES**

SUBPART A: DEFINITIONS AND GENERAL PROVISIONS

Section
240.101 Preamble
240.102 Definitions
240.103 Prohibitions
240.104 Inspection
240.105 Penalties
240.106 Determination of Violation

SUBPART B: EMISSIONS

Section
240.121 Smoke Emissions
240.122 Diesel Engine Emissions
240.123 Liquid Petroleum Gas Fuel Systems

**SUBCHAPTER 1: AIR QUALITY STANDARDS
AND EPISODES**

**PART 243
AIR QUALITY STANDARDS**

SUBPART A: GENERAL PROVISIONS

Section
243.101 Definitions
243.102 Preamble
243.103 Applicability
243.104 Nondegradation
243.106 Monitoring
243.107 Reference Conditions
243.108 Incorporations by Reference

SUBPART B: STANDARDS AND MEASUREMENT METHODS

Section
243.121 Particulates
243.122 Sulfur Oxides (Sulfur Dioxide)
243.123 Carbon Monoxide
243.124 Nitrogen Dioxide
243.125 Ozone
243.126 Lead

**PART 244
EPISODES**

SUBPART A: DEFINITIONS AND GENERAL PROVISIONS

Section
244.101 Definitions
244.102 Responsibility of the Agency
244.103 Determination of Required Actions
244.104 Determination of Atmospheric
Conditions
244.105 Determination of Expected Contaminant
Emissions
244.106 Monitoring
244.107 Determination of Areas Affected
244.108 Failure to Comply with Episode
Requirements
244.109 Sealing of Offenders

SUBPART B: LOCAL AGENCY RESPONSIBILITIES

Section
244.121 Local Agency Responsibilities

SUBPART C: EPISODE ACTION PLANS

Section
244.141 Requirement for Plans
244.142 Facilities for which Action Plans are
Required
244.143 Submission of Plans
244.144 Contents of Plans
244.145 Processing Procedures

SUBPART D: EPISODE STAGES

Section
244.161 Watch, Alert and Emergency Levels
244.162 Criteria for Declaring an Advisory or
Watch
244.163 Criteria for Declaring a Yellow Alert
244.164 Criteria for Declaring a Red Alert
244.165 Criteria for Declaring an Emergency
244.166 Criteria for Terminating Watch, Alert
and Emergency
244.167 Episode Stage Notification
244.168 Contents of Episode Stage Notification
244.169 Actions During Episode Stages

**PART 245
ODORS**

Section
245.100 Definitions
245.101 Incorporation by Reference
245.120 Inedible Rendering Process
245.121 Objectionable Odor Nuisance
Determination

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE 8: AIR POLLUTION

CHAPTER 1: POLLUTION CONTROL BOARD

**SUBCHAPTER a: PERMITS AND
GENERAL PROVISIONS**

PART 201

**PERMITS AND GENERAL PROVISIONS
SUBPART A: DEFINITIONS**

Section	
201.101	Other Definitions
201.102	Definitions
201.103	Abbreviations and Units
201.104	Incorporations by Reference

SUBPART B: GENERAL PROVISIONS

Section	
201.121	Existence of Permit No Defense
201.122	Proof of Emissions
201.123	Burden of Persuasion Regarding Exceptions
201.124	Annual Report
201.125	Severability
201.126	Repealer

SUBPART C: PROHIBITIONS

Section	
201.141	Prohibition of Air Pollution
201.142	Construction Permit Required
201.143	Operating Permits for New Sources
201.144	Operating Permits for Existing Sources
201.146	Exemptions from Permit Requirement
201.147	Former Permits
201.148	Operation Without Compliance Program and Project Completion Schedule
201.149	Operation During Malfunction, Breakdown or Startups
201.150	Circumvention
201.151	Design of Effluent Exhaust Systems

**SUBPART D: PERMIT APPLICATIONS AND
REVIEW PROCESS**

Section	
201.152	Contents of Application for Construction Permit
201.153	Incomplete Applications
201.154	Signatures
201.155	Standards for Issuance
201.156	Conditions
201.157	Contents of Application for Operating Permit
201.158	Incomplete Applications
201.159	Signatures
201.160	Standards for Issuance
201.161	Conditions
201.162	Duration
201.163	Joint Construction and Operating Permits
201.164	Design Criteria
201.165	Hearings

**SUBPART F: RENEWAL, REVOCATION, REVISION
AND APPEAL**

Section	
201.207	Revocation

201.209	Revisions to Permits
201.210	Appeals from Conditions

**SUBPART H: COMPLIANCE PROGRAMS AND
PROJECT COMPLETION SCHEDULES**

Section	
201.241	Contents of Compliance Program
201.242	Contents of Project Completion Schedule
201.243	Standards for Approval
201.244	Revisions
201.245	Effects of Approval
201.246	Records and Reports
201.247	Submission and Approval Dates

**SUBPART I: MALFUNCTIONS, BREAKDOWNS
OR STARTUPS**

Section	
201.261	Contents of Request for Permission to Operate During a Malfunction, Breakdown or Startup
201.262	Standards for Granting Permission to Operate During a Malfunction, Breakdown or Startup
201.263	Records and Reports
201.264	Continued Operation or Startup Prior to Granting of Operating Permit
201.265	Effect of Granting of Permission to Operate During a Malfunction, Breakdown or Startup

SUBPART J: MONITORING AND TESTING

Section	
201.281	Permit Monitoring Equipment Requirements
201.282	Testing
201.283	Records and Reports

SUBPART K: RECORDS AND REPORTS

Section	
201.301	Records
201.302	Reports

SUBPART L: CONTINUOUS MONITORING

Section	
201.401	Continuous Monitoring Requirements
201.402	Alternative Monitoring
201.403	Exempt Sources
201.404	Monitoring System Malfunction
201.405	Excess Emission Reporting
201.406	Data Reduction
201.407	Retention of Information
201.408	Compliance Schedules

Appendix A: Rule Into Section Table

Appendix B: Section Into Rule Table

Appendix C: Past Compliance Dates

AUTHORITY: Implementing Section 10 and
authorized by Section 27 of the Environmental
Protection Act (Ill. Rev. Stat. 1981, ch. 111
1/2, pars. 1010 and 1027).

SOURCE: Adopted as Chapter 2: Air Pollution,
Part I: General Provisions, in R71-23, 4 PCB
191, filed and effective April 14, 1972; amended
in R78-3 and 4, 35 PCB 75 and 243, at 3 Ill.
Reg. 30, p. 124, effective July 28, 1979;

amended in R88-5, at 7 Ill. Reg. 1244, effective January 21, 1983; codified at 7 Ill. Reg. 13579, amended in R82-1 (Docket A) at 10 Ill. Reg. 12628, effective July 7, 1986; amended in R87-38 at 13 Ill. Reg. 2066, effective February 3, 1989.

SUBPART A: DEFINITIONS

Section 201.101 Other Definitions

a) Except as hereinafter stated and unless a different meaning of a term is clear from its context, the definitions of terms used in 35 Ill. Adm. Code: Subtitle B, Chapter 1 (Chapter), shall be the same as those used in the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1001 et seq.) (Act).

b) All terms defined in 35 Ill. Adm. Code 211 which appear in this Part have the definitions specified by 35 Ill. Adm. Code 211.

Section 201.102 Definitions

"Air Contaminant": any solid, liquid or gaseous matter, any odor or any form of energy, that is capable of being released into the atmosphere from an emission source.

"Air Pollution Control Equipment": any equipment or facility of a type intended to eliminate, prevent, reduce or control the emission of specified air contaminants to the atmosphere.

"Air Pollution": the presence in the atmosphere of one or more air contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life, to health, or to property, or to unreasonably interfere with the enjoyment of life or property.

"Ambient Air": that portion of the atmosphere external to buildings comprising emission sources.

"Ambient Air Quality Standard": those standards promulgated from time to time by the Pollution Control Board (Board) pursuant to authority contained in the Act and found at 35 Ill. Adm. Code 243, or by the United States Environmental Protection Agency (USEPA) pursuant to authority contained in 42 U.S.C. 7401 et seq., as amended from time to time.

"Clean Air Act": the Clean Air Act of 1970, as amended, including the Clean Air Act Amendments of 1977, as amended (42 U.S.C. 7401 et seq.).

"Commence": the act of entering into a binding agreement or contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modifications.

"Construction": commencement of on-site fabrication, erection or installation of an

emission source or of air pollution control equipment.

"Emission Source": any equipment or facility of a type capable of emitting specified air contaminants to the atmosphere.

"Existing Air Pollution Control Equipment": any air pollution control equipment, the construction or modification of which has commenced prior to April 14, 1972.

"Existing Emission Source": any emission source, the construction or modification of which has commenced prior to April 14, 1972.

"Modification": any physical change in, or change in the method of operations, of an emission source or of air pollution control equipment which increases the amount of any specified air contaminant emitted by such source or equipment or which results in the emission of any specified air contaminant not previously emitted. It shall be presumed that an increase in the use of raw materials, the time of operation or the rate of production will change the amount of any specified air contaminant emitted. Notwithstanding any other provisions of this definition, for purposes of permits issued pursuant to Subpart D, the Illinois Environmental Protection Agency (Agency) may specify conditions under which an emission source or air pollution control equipment may be operated without causing a modification as herein defined, and normal cyclical variations, before the date operating permits are required, shall not be considered modifications.

"New Air Pollution Control Equipment": any air pollution control equipment, the construction or modification of which is commenced on or after April 14, 1972.

"New Emission Source": any emission source, the construction or modification of which is commenced on or after April 14, 1972.

"Owner or Operator": any person who owns, leases, controls or supervises an emission source or air pollution control equipment.

"Person": any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, agency, political subdivision of this State, any other State or political subdivision or agency thereof or any legal successor, representative, agent or agency of the foregoing.

"PSD Increment": the maximum allowable increase over baseline concentration of any air contaminant as determined by Section 163 of the Clean Air Act (42 U.S.C. 7473) and regulations adopted thereunder.

"Specified Air Contaminant": any air contaminant as to which this Subtitle contains emission standards or other specific limitations.

"Standard Industrial Classification Manual": the Standard Industrial Classification Manual (1972), Superintendent of Documents, U.S.

Government Printing Office, Washington, D.C.
20402.

(Source: Amended at 10 Ill. Reg. 12628,
effective July 7, 1986)

Section 201.103 Abbreviations and Units

a) The following abbreviations have been used in this Part:

btu or Btu	British thermal units (60°F)
gal	gallons
hp	horsepower
hr	hour
gal/mo	gallons per month
gal/yr	gallons per year
kPa	kilopascals
kPa absolute	kilopascals absolute
kW	kilowatts
l	liters
m or M	million
MW	megawatts; one million watts
psi	pounds per square inch
psia	pounds per square inch absolute

b) The following conversion factors have been used in this Part:

English	Metric
1 gal	3.785 l
1000 gal	3.785 cubic meters
1 hp	0.7457 kW
1 mbtu/hr	0.293 MW
1 psi	6.897 kPa

(Source: Amended at 10 Ill. Reg. 12628)

Section 201.104 Incorporations by Reference

The following materials are incorporated by reference:

- Standard Industrial Classification Manual (1972), Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.
- ASAE Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers, American Society of Agricultural Engineers, 2950 Niles Road, St. Joseph, MI 49085.

(Source: Adopted and codified at 7 Ill. Reg. 13579)

SUBPART B: GENERAL PROVISIONS

Section 201.121 Existence of Permit No Defense

The existence of a permit under this Part shall not constitute a defense to a violation of the Act or any rule or regulation of this Chapter, except for construction or operation without a permit.

Section 201.122 Proof of Emissions

Notwithstanding other provisions of this Chapter, evidence that specified air contaminant emissions, as calculated on the basis of standard emission factors or other factors generally accepted as true by those persons engaged in the field of air pollution control, exceed the limitations prescribed by this Chapter shall constitute adequate proof of a violation, in the absence of a showing that actual emissions are in compliance.

Section 201.123 Burden of Persuasion Regarding Exceptions

In any proceeding pursuant to this Chapter, if an exception stated in this Chapter would limit an obligation, limit a liability or eliminate either an obligation or a liability, the person who would benefit from the application of the exception shall have the burden of persuasion that the exception applies and that the terms of the exception have been met.

Section 201.124 Annual Report

The Agency shall annually prepare and submit to the Board an Air Contaminant Emission Report which lists the emission sources in the State for which an operating permit is required under this Part, describes the type, quantity and concentrations of the various specified contaminants being emitted, and describes the existing and planned controls and the scheduled dates for completion of improvements.

Section 201.125 Severability

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

Section 201.126 Repealer

Each provision of the Rules and Regulations Governing the Control of Air Pollution, as amended August 19, 1969, applying to an emission source shall remain in full force and effect unless and until such source is required to comply with a corresponding provision of this Chapter.

SUBPART C: PROHIBITIONS

Section 201.141 Prohibition of Air Pollution

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 cause or tend to cause air pollution in Illinois, or so as to violate the provisions of this Chapter, or so as to prevent the attainment or maintenance of any applicable ambient air quality standard.

Section 201.142 Construction Permit Required

No person shall cause or allow the construction of any new emission source or any new air pollution control equipment, or cause or allow the modification of any existing emission source or air pollution control equipment, without first obtaining a construction permit from the Agency, except as provided in Section 201.146.

Section 201.143 Operating Permits for New Sources

No person shall cause or allow the operation of any new emission source or new air pollution control equipment of a type for which a construction permit is required by Section 201.142 without first obtaining an operating permit from the Agency, except for such testing operations as may be authorized by the construction permit. Applications for operating permits shall be made at such times and contain such information (in addition to the information required by Section 201.157) as shall be specified in the construction permit.

Section 201.144 Operating Permits for Existing Sources

No person shall cause or allow the operation of any existing emission source or any existing air pollution control equipment without first obtaining an operating permit from the Agency, except as provided in Section 201.146. Dates on which permits were required are shown in Appendix C.

Section 201.146 Exemptions from Permit Requirement

No permit is required for the following classes of equipment:

- a) Air contaminant detectors or recorders, combustion controllers or combustion shutoffs;
- b) Air conditioning or ventilating equipment not designed to remove air contaminants generated by or released from associated equipment;
- c) Fuel burning emission sources for indirect systems and for heating and reheating furnace systems used exclusively for residential or commercial establishments using gas and/or fuel oil exclusively with a total capacity of less than 14.6 MW (50 mmBtu/hr) input;
- d) Fuel burning emission sources other than those listed in subsection (c) for indirect heating systems with a total capacity of less than 293 kW (1 mmBtu/hr) input;

e) Mobile internal combustion and jet engines, marine installation and locomotives;

f) Laboratory equipment used exclusively for chemical or physical analysis;

g) Painting operations using not in excess of 18,925 l (5,000 gal) of paint (including thinner) per year;

h) Any emission source acquired exclusively for domestic use, except that a permit shall be required for any incinerator and for any burning emission source using solid fuel with a total capacity of 14.6 MW (50 mmBtu/hr) input or more;

i) Stationary internal combustion engines of less than 1118 kW (1500 horsepower);

j) Stacks or vents used to prevent the escape of sewer gases through plumbing traps;

k) Safety devices designed to protect life and limb, provided that safety devices associated with an emission source shall be included within the permit for such emission source;

l) Storage tanks for liquids for retail dispensing except for storage tanks located at gasoline dispensing facilities that are subject to the requirements of 35 Ill. Adm. Code 215.583;

m) All printing operations using less than 2839 l (750 gal) of organic solvents per year;

n) Storage tanks of organic liquids with a capacity of less than 18,925 l (5000 gal) except for storage tanks located at gasoline dispensing facilities that are subject to the requirements of 35 Ill. Adm. Code 215.583;

o) Flanged and threaded pipe connections, vessel manways and process valves capable of discharging specified air contaminants to the atmosphere;

p) Sampling connections used exclusively to withdraw materials for laboratory testing and analyses;

q) All storage tanks of Illinois crude oil with capacity of less than 151,400 l (40,000 gal) located on oil field sites;

r) All organic material-water single or multiple compartment effluent water separator facilities for Illinois crude oil of vapor pressure of less than 34.5 kPa absolute (5 psia);

s) Grain-handling operations, exclusive of grain-drying operations, with an annual grain through-put not exceeding 300,000 bushels;

t) Grain-drying operations with a total grain-drying capacity not exceeding 750 bushels per hour for 5% moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineers

Standard 248.2, Section 9. Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers:

- u) Portable grain-handling equipment and one-turn storage space;
- v) Cold cleaning degreasers;
- w) Coin-operated dry cleaning operations; and
- x) Dry cleaning facilities consuming less than 30 gallons per month (360 gallons per year) of perchloroethylene.

(Source: Amended at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 201.147 Former Permits

Any permit issued by the Agency, or any predecessor, is subject to the requirements of Sections 201.121, 201.142 through 201.146 and Subparts D through F, and shall be revised or revoked as necessary to conform to this Chapter.

Section 201.148 Operation Without Compliance Program and Project Completion Schedule

- a) No person shall cause or allow the operation of an emission source which is not in compliance with the requirements of 35 Ill. Adm. Code 215 unless such person is in compliance with a compliance program as provided for in Subpart H and in the applicable provisions of 35 Ill. Adm. Code 215.
- b) Any compliance plan or project completion schedule, where applicable, shall be a binding condition of the operating permit for the source.

(Source: Amended at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 201.149 Operation During Malfunction, Breakdown or Startups

No person shall cause or allow the continued operation of an emission source during malfunction or breakdown of the emission source or related air pollution control equipment if such operation would cause a violation of the standards or limitations set forth in Subchapter c of this Chapter; unless the current operating permit granted by the Agency provides for operation during a malfunction or breakdown. No person shall cause or allow violation of the standards or limitations set forth in that Subchapter during startup unless the current operating permit granted by the Agency provides for violation of such standards or limitations during startup.

Section 201.150 Circumvention

Except as provided in 35 Ill. Adm. Code 212.207, 214.162 and 214.182 through 214.185, and except as further provided by Section 201.151, no person shall cause or allow the construction or operation of any device or any means, including the creation or use of any corporations or other business entities having interlocking directorships or substantially identical ownerships which, without resulting in a reduction in the total amount of any air contaminant emitted, conceals, dilutes or permits air contaminant emissions which would otherwise violate these regulations.

Section 201.151 Design of Effluent Exhaust Systems

- a) No person shall cause or allow the operation of an emission source or of air pollution control equipment without providing one or more stacks or vents that are designed to prevent the concentration of any air contaminant from:
 - 1) Exceeding any applicable ambient air quality standard, either alone or in combination with air contaminants from other sources; or
 - 2) Causing or tending to cause air pollution, either alone or in combination with air contaminants from other sources; or
 - 3) Exceeding the emission standards and limitations of Subchapter c of this Chapter.
- b) Exception. This rule shall not apply to emission sources, such as stock piles of particulate matter which, because of the disperse nature of such emission sources, cannot reasonably be expected to be emitted through a stack.

SUBPART D: PERMIT APPLICATIONS AND REVIEW PROCESS

Section 201.152 Contents of Application for Construction Permit

An application for a construction permit shall contain, as a minimum, the following data and information: the nature of the emission source and air pollution control equipment, including the expected life and deterioration rate; information concerning processes to which the emission source or air pollution control equipment is related; the quantities and types of raw materials to be used in the emission source or air pollution control equipment; the nature, specific sources and quantities of uncontrolled and controlled air contaminant

emissions at the facility which includes the emission source or air pollution control equipment; the type, size, efficiency and specifications (including engineering drawings, plans and specifications certified to by a registered Illinois professional engineer) of the proposed emission source or air pollution control equipment; maps, statistics and other data reasonably sufficient to describe the location of the emission source or air pollution control equipment. The Agency may waive the submission by the applicant of such engineering drawings, plans, specifications or such other portions of the above data or information as it shall deem inappropriate or unnecessary to the construction permit application, provided that any such waiver by the Agency shall be given in writing to the applicant. The Agency may adopt procedures which require data and information in addition to and in amplification of the matters specified in the first sentence of this paragraph, which are reasonably designed to determine compliance with this Chapter, and ambient air quality standards, and which set forth the format by which all data and information shall be submitted.

Section 201.153 Incomplete Applications

An application shall not be deemed to be filed until the applicant has submitted all information and completed all application forms required by Section 201.152 and procedures adopted and effective pursuant thereto. Provided, however, that if the Agency fails to notify the applicant within 30 days after the filing of a purported application that the application is incomplete and of the reasons the Agency deems it incomplete, the application shall be deemed to have been filed as of the date of such purported filing. The applicant may treat the Agency's notification that an application is incomplete as a denial of the application for purposes of review.

Section 201.154 Signatures

All applications and supplements thereto shall be signed by the owner and operator of the emission source or air pollution control equipment, or their authorized agent, and shall be accompanied by evidence of authority to sign the application.

Section 201.155 Standards for Issuance

No construction permit shall be granted unless the applicant submits proof to the Agency that:

- a) The emission source or air pollution control equipment will be constructed or modified to operate so as not to cause a violation of the Act or of this Chapter; and
- b) If subject to a future compliance date, the applicant has an approved compliance program and project completion schedule in accordance with the provisions of Subpart H.

Section 201.156 Conditions

The Agency may impose such conditions in a construction permit as may be necessary to accomplish the purposes of the Act, and as are not inconsistent with the regulations promulgated by the Board thereunder. Except as herein specified, nothing in this Chapter shall be deemed to limit the power of the Agency in this regard. Such conditions may include conditions specifying any testing operations that may be conducted under the construction permit.

(Source: Amended at 3 Ill. Reg. 124, effective July 28, 1979)

Section 201.157 Contents of Application for Operating Permit

An application for an operating permit shall contain, as a minimum, the data and information specified in Section 201.152. Each application shall list all individual emission sources for which a permit is sought. Any applicant may seek to obtain from the Agency a permit for each emission source, or such emission sources as are similar in design or principle of operation or function, or for all emission sources encompassed in an identifiable operating unit. To the extent that the above specified data and information has previously been submitted to the Agency pursuant to this Subpart, the data and information need not be resubmitted; provided, however, that the applicant must certify that the data and information previously submitted remains true, correct and current. An application for an operating permit shall contain a description of the startup procedure for each emission source, the duration and frequency of startups, the types and quantities of emissions during startup, and the applicant's efforts to minimize any such startup emissions, duration of individual startups, and frequency of startups. The Agency may adopt procedures which require data and information in addition to and in amplification of the matters specified in the first sentence of this Section, which are reasonably designed to determine compliance with this Chapter, and ambient air quality standards, and which set forth the format by which all data and information shall be submitted.

Section 201.158 Incomplete Applications

An application shall not be deemed to be filed until the applicant has submitted all information and completed application forms required by Section 201.157 and procedures adopted and effective pursuant hereto. Provided, however, that if the Agency fails to notify the applicant within 30 days after the filing of a purported application that the application is incomplete and of the reasons the Agency deems it incomplete, the application shall be deemed to have been filed as of the date of such purported filing. The applicant may treat the Agency's notification that an application is incomplete as a denial of the application for purposes of review.

Section 201.159 Signatures

All applications and supplements thereto shall be signed by the owner and operator of the emission source or air pollution control equipment, or their authorized agent, and shall be accompanied by evidence of authority to sign the application.

Section 201.160 Standards for Issuance

No operating permit shall be granted unless the applicant submits proof to the Agency that:

- a) The emission source or air pollution control equipment has been constructed or modified to operate so as not to cause a violation of the Act or of this Chapter, or has been granted a variance therefrom by the Board and is in full compliance with such variance; and
- b) The emission source or air pollution control equipment has been constructed or modified in accordance with all conditions in the construction permit, where applicable; and
- c) The emission source or air pollution control equipment has been shown by tests in accordance with the provisions of Subpart J to operate in accordance with the emission limitations set forth in this Chapter, provided that the Agency may waive the requirement for actual tests where sufficient standard testing information is available; and
- d) The applicant has taken all technically feasible measures, including changes in work rules, to minimize the duration and frequency of startups and to reduce the quantity of emissions during startup; and
- e) If subject to a future compliance date, the applicant has an approved compliance program and project completion schedule in accordance with the provisions of Subpart H; and
- f) If required, the applicant has an approved episode action plan in effect in accordance with the provisions of JS III, Adm. Code 244.

Section 201.161 Conditions

The Agency may impose such conditions in an operating permit as may be necessary to accomplish the purposes of the Act, and as are not inconsistent with the regulations promulgated by the Board thereunder. Except as herein specified, nothing in this Chapter shall be deemed to limit the power of the Agency in this regard. When deemed appropriate as a condition to the issuance of an operating permit, the Agency may require that the permittee adequately maintain the air pollution control equipment covered by the permit. To assure that such a maintenance program is planned, the Agency may require that the permittee have a maintenance program and keep such maintenance records as are necessary to demonstrate compliance with this rule; provided, however, the Agency shall not have the authority

to approve the maintenance programs required thereunder.

Section 201.162 Duration

No operating permit shall be valid longer than five years or such shorter period as the Agency may specify in the operating permit as necessary to accomplish the purposes of the Act and this Chapter. Applications for renewal of an operating permit shall be submitted to the Agency at least 90 days prior to the expiration of the prior permit, and shall conform to Sections 201.157, 201.158 and 201.159. The standards for issuance of renewal permits shall be as set forth in Section 201.160.

(Source: Amended at J III, Reg. 124, effective July 28, 1979)

Section 201.163 Joint Construction and Operating Permits

In cases where the Agency determines that an emission source or air pollution control equipment is sufficiently standard so as to obviate the need for separate construction and operating permits, the Agency may issue a joint construction and operating permit. The Agency may adopt procedures which set forth the circumstances under which joint construction and operating permits may be issued; require data and information designed to determine compliance with this Chapter, and ambient air quality standards; and which set forth the format by which all data and information shall be submitted. The standards for issuance of joint construction and operating permits shall be as set forth in Sections 201.155 and 201.160. Except as herein provided, nothing in this Chapter shall be deemed to limit the power of the Agency in this regard. No joint construction and operating permit shall be valid for longer than five years or such shorter period as the Agency may specify. The joint construction and operating permit as necessary to accomplish the purposes of this Chapter. Applications for renewal of a permit shall be submitted to the Agency at least 90 days prior to the expiration of the prior permit, and shall conform to such procedures as may have been adopted by the Agency; and the standards for issuance of renewal permits shall be as set forth in Sections 201.155 and 201.160. The term "operating permit" as used elsewhere in this Chapter shall be deemed to include a joint construction and operating permit.

(Source: Amended at J III, Reg. 124, effective July 28, 1979)

Section 201.164 Design Criteria

- a) The Agency may adopt procedures which set forth criteria for the design, operation or maintenance of emission sources and air pollution control equipment. These procedures shall be revised from time to time

to reflect current engineering judgment and advances in the state of the art.

- b) Before adopting new criteria or making substantive changes to any criteria adopted by the Agency, the Agency shall:

- 1) Publish a summary of the proposed changes in the Environmental Register or a comparable publication at the Agency's expense; and
- 2) Provide a copy of the full text of the proposed changes to any person who in writing so requests; and
- 3) Defer adoption of the changes for 45 days from the date of publication to allow submission and consideration of written comments on the proposed changes.

Section 201.165 Hearings

- a) The Agency may conduct hearings, prior to issuing a permit pursuant to this Chapter, to determine whether an applicant has submitted proof that the emission source or air pollution control equipment is or will be in compliance with every rule of this Chapter.
- b) The Agency shall adopt procedural regulations for the conduct of such hearings.

SUBPART E: CONDITIONS OF PERMITS

Reserved.

SUBPART F: RENEWAL, REVOCATION, REVISION AND APPEAL

Section 201.207 Revocation

Violation of any of the conditions of a permit, or the failure to comply with any rule or regulation of this Chapter, shall be grounds for revocation of the permit, as well as for other sanctions provided in the Act. Such sanctions shall be sought by filing a complaint with the Board.

Section 201.209 Revisions to Permits

The Agency may revise any permit issued pursuant to Subpart D or any condition contained in such permit, as follows:

- a) Upon reapplication by the permittee; or
- b) Upon the revision of the Act or this Chapter.

Section 201.210 Appeals from Conditions

An applicant may consider any condition imposed by the Agency in a permit as a refusal by the Agency to grant a permit, which shall entitle the applicant to appeal the Agency's decision to

the Board pursuant to Section 40 of the Act (Ill. Rev. Stat. 1981, ch. 111 1/2, par. 1040).

(Source: Amended at 3 Ill. Reg. 124, effective July 28, 1979)

SUBPART G: EXPERIMENTAL PERMITS

Reserved

SUBPART H: COMPLIANCE PROGRAMS AND PROJECT COMPLETION SCHEDULES

Section 201.241 Contents of Compliance Program

A compliance program shall contain, as a minimum, the following data and information: the nature and/or type of the proposed air pollution control equipment or proposed air pollution control technique which has been chosen to achieve compliance; the cost, availability and technical reasonableness of the proposed air pollution control equipment or proposed air pollution control technique, including detailed cost analyses and copies of engineering reports or studies sufficient to prove to the Agency that the compliance program will result in compliance with applicable standards and limitations of Subchapter c of this Chapter.

Section 201.242 Contents of Project Completion Schedule

- a) A project completion schedule shall contain, as a minimum, the following data and information: a final compliance date, which date shall be no later than the applicable date prescribed in Subchapter c of this Chapter; and reasonable interim dates by which various increments of the proposed compliance program shall be completed, such as dates when contracts will be awarded, dates for equipment delivery and dates for construction of preliminary structural work.
- b) The Agency may adopt procedures which require data and information in addition to and in amplification of the matters specified in subsection (a), and which set forth the format by which all data and information shall be submitted.

Section 201.243 Standards for Approval

No compliance program and project completion schedule shall be approved unless the applicant submits proof to the Agency that:

- a) The compliance program will result in timely compliance with applicable standards and limitations of Subchapter c of this Chapter; and
- b) The owner or operator has provided adequate proof that it is committed to the compliance program or project completion schedule.

including, in the case of a corporation, certification by a duly authorized officer of such corporation that such corporation approves each and every provision of such program and of such schedule.

Section 201.244 Revisions

The owner or operator of an emission source or air pollution control equipment subject to an approved compliance program and project completion schedule may request a revision of such program or schedule at any time. In addition, the Agency may require a revision upon any change in the Act or this Chapter. The Agency shall not approve any revision which contains a final compliance date later than the applicable date prescribed in Subchapter c of this Chapter.

Section 201.245 Effects of Approval

The approval of a compliance program and project completion schedule shall be a condition precedent to the issuance and effectiveness of a permit pursuant to Subpart D. An approved compliance program and project completion schedule, and full compliance therewith, and a current operating permit, shall be a prima facie defense to any enforcement action alleging a violation of the standards or limitations set forth in Subchapter c of this Chapter with respect to any air contaminant included in such program and schedule during the period of the program. Failure to adhere to an approved compliance schedule shall constitute a violation of this Part for which appropriate sanctions may be sought in accordance with the Act.

Section 201.246 Records and Reports

Any person subject to this Subpart shall maintain such records and make such reports as may be required in procedures adopted by the Agency pursuant to Subpart K.

Section 201.247 Submission and Approval Dates

The owner or operator of an emission source required to have a compliance plan and project completion schedule shall have a compliance plan and a project completion schedule, where applicable, approved by the Agency by the dates indicated in Subchapter c of this Chapter. A compliance plan and project completion schedule, where applicable, shall be submitted at least 90 days before the date required in Subchapter c of this Chapter.

SUBPART I: MALFUNCTIONS, BREAKDOWNS OR STARTUPS

Section 201.261 Contents of Request for Permission to Operate During a Malfunction, Breakdown or Startup

- a) A request for permission to continue to operate during a malfunction or breakdown, if

desired, shall be included as an integral part of the application for an operating permit pursuant to Subpart D, and shall include as a minimum: a full and detailed explanation of why such continued operation is necessary; the anticipated nature, sources and quantities of emissions which will occur during such continued operation; the anticipated length of time during which such operation will continue; all measures, such as use of off-shift labor or equipment which will be taken to minimize the quantity of air contaminant emissions and length of time during which such operation will continue. When the standards or limitations of Subchapter c of this Chapter will be violated during startup, a request for permission to violate such standards or limitations shall be an integral part of the application for an operating permit pursuant to Subpart D, and shall include, as a minimum: a description of the startup procedure for each emission source, the duration and frequencies of such startups; the types and quantities of emissions during such startups and the applicant's efforts to minimize any such startup emissions, duration of individual startups and frequency of startups.

- b) The Agency may adopt procedures which require data and information in addition to or in amplification of the matters set forth in subsection (a), and which set forth the format in which all data and information shall be submitted. Such procedures and formats, and revisions thereto, shall not become effective until filed with the Secretary of State as required by the Administrative Procedure Act (III. Rev. Stat. 1981, ch. 127, par. 1001 et seq.) (APA).

Section 201.262 Standards for Granting Permission to Operate During a Malfunction, Breakdown or Startup

Permission shall not be granted to allow continued operation during a malfunction or breakdown unless the applicant submits proof to the Agency that: such continued operation is necessary to prevent injury to persons or severe damage to equipment; or that such continued operation is required to provide essential services; provided, however, that continued operation solely for the economic benefit of the owner or operator shall not be a sufficient reason for granting of permission. Permission shall not be granted to allow violation of the standards or limitations of Subchapter c of this Chapter during startup unless the applicant has affirmatively demonstrated that all reasonable efforts have been made to minimize startup emissions, duration of individual startups and frequency of startups.

Section 201.263 Records and Reports

Any person who causes or allows the continued operation of an emission source during a malfunction or breakdown of the emission source or related air pollution control equipment when such continued operation would cause a violation

of the standards or limitations set forth in Subchapter c of this Chapter shall immediately report such incident to the Agency by telephone, telegraph or such other method as constitutes the fastest available alternative, except if otherwise provided in the operating permit. Thereafter, any such person shall comply with all reasonable directives of the Agency with respect to the incident. In addition, any person subject to this Subpart shall maintain such records and make such reports as may be required in procedures adopted by the Agency pursuant to Subpart K.

Section 201.264 Continued Operation or Startup Prior to Granting of Operating Permit

Any person desiring to continue to operate, or to startup in accordance with Section 201.149 prior to the date when an operating permit is required pursuant to Section 201.143 or 201.144 shall make immediate application for permission to operate during a malfunction, breakdown or startup in accordance with Section 201.261.

Section 201.265 Effect of Granting of Permission to Operate During a Malfunction, Breakdown or Startup

The granting of permission to operate during a malfunction or breakdown, or to violate the standards or limitations of Subchapter c of this Chapter during startup, and full compliance with any terms and conditions connected therewith, shall be a prima facie defense to an enforcement action alleging a violation of Section 201.149, of the emission and air quality standards of this Chapter, and of the prohibition of air pollution during the time of such malfunction, breakdown or startup.

SUBPART J: MONITORING AND TESTING

Section 201.281 Permit Monitoring Equipment Requirements

- a) Except as otherwise provided at Subpart I of this Part, every emission source or air pollution control equipment shall be equipped with such monitoring instruments as may be required as a condition to a permit issued by the Agency. The permit may require that such monitoring instruments be continuous or intermittent. Such monitoring instruments shall be installed, maintained and operated at the expense of the owner or operator of the emission source or air pollution control equipment. A permit condition to monitor is appealable to the Board pursuant to Section 40 of the Act.

(Source: Amended at 13 Ill. Reg. 2066, effective February 3, 1989)

Section 201.282 Testing

Every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

- a) **Testing by Owner or Operator.** The Agency may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Agency, at such reasonable times as may be specified by the Agency and at the expense of the owner or operator of the emission source or air pollution control equipment. The Agency may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Agency shall have the right to observe all aspects of such tests.

- b) **Testing by the Agency.** The Agency shall have the right to conduct such tests at any time at its own expense. Upon request of the Agency, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Agency, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

Section 201.283 Records and Reports

Any person subject to this Subpart shall maintain such records and make such reports as may be required in procedures adopted by the Agency pursuant to Subpart K.

SUBPART K: RECORDS AND REPORTS

Section 201.301 Records

The owner or operator of any emission source or air pollution control equipment shall maintain, as a minimum: records detailing all activities pursuant to any compliance program and project completion schedule pursuant to Subpart H; records detailing all malfunctions, breakdowns or startups pursuant to Subpart I and records of all monitoring and testing conducted pursuant to Subpart J, plus records of all monitoring and testing of any type whatsoever conducted with respect to specified air contaminants. All such records shall be made available to the Agency at any reasonable time.

a) The Agency may adopt procedures which:

- 1) Require additional records be maintained consistent with these regulations; and
- 2) Set forth the format in which all records shall be maintained.

b) Such procedures and formats, and revisions thereto, shall not become effective until filed with the Secretary of State as required by the APA.

Section 201.302 Reports

- a) The owner or operator of any emission source or air pollution control equipment shall submit to the Agency as a minimum, annual reports detailing the nature, specific sources and total annual quantities of all specified air contaminant emissions; provided, however, that the Agency may require more frequent reports where necessary to accomplish the purposes of the Act and this Chapter.
- b) The Agency may adopt procedures which require that additional reports be submitted, and which set forth the format in which all reports shall be submitted. Such procedures and formats, and revisions thereto, shall not become effective until filed with the Secretary of State as required by the APA.
- c) All emissions data received by the Agency relative to specified air contaminants shall be correlated by the Agency with any emission limitations or standards set forth in Subchapter c of this Chapter.
- d) All emission data received by the Agency, shall be available for public inspection at reasonable times and upon reasonable notice.

SUBPART E: CONTINUOUS MONITORING

Section 201.401 Continuous Monitoring Requirements

- a) Except as otherwise provided at Section 201.402 and Section 201.403, the owners and operators of the following emission sources shall install, operate, calibrate and maintain continuous monitoring equipment for the indicated pollutants.
- 1) Fossil fuel-fired steam generators with an annual average capacity factor greater than 30% as reported to the Federal Power Commission for calendar year 1974, or as otherwise demonstrated to the Agency through the use of annual production data and equipment rating information representative of the facility's operations, shall monitor for:
 - A) Opacity, when the steam generator is greater than 250 million Btu per hour heat input unless:

1) Gas is the only fuel burned; or

11) Oil or a mixture of gas and oil are the only fuels burned and the source can comply with the limitations applicable to that source for particulate matter and opacity without use of collection equipment for particulate matter and the source has never been found to be in violation of an applicable visible or particulate emission standard through any administrative or judicial proceedings.

B) Nitrogen Oxides, when:

1) The steam generator is greater than 1000 million Btu per hour heat input;

11) The facility is located in an Air Quality Control Region where the Administrator, U.S. Environmental Protection Agency, has specifically determined pursuant to Section 107 of the Clean Air Act (42 U.S.C. 7407) that a control strategy for nitrogen dioxide is necessary to attain the national standards; and

111) The owner or operator has not demonstrated during compliance tests performed pursuant to 35 Ill. Adm. Code 230:Appendix A or in regulations adopted by the U.S. Environmental Protection Agency under Section 111 of the Clean Air Act and made applicable in Illinois pursuant to Section 9.1 of the Illinois Environmental Protection Act that the source emits nitrogen oxides at levels less than 30% or more below the emissions standards applicable to that source.

C) Sulfur dioxide, when the steam generator is greater than 250 million Btu per hour heat input and which has installed and operates sulfur dioxide pollution control equipment.

D) Percent oxygen or carbon dioxide, when measurements of oxygen or carbon dioxide in the flue gas are required pursuant to 35 Ill. Adm. Code 230:Appendix A or in regulations adopted by the U.S. Environmental Protection Agency under Section 111 of the Clean Air Act and made applicable in Illinois pursuant to Section 9.1 of the Illinois

Environmental Protection Act, or 40 CFR 51, Appendix P (this incorporation includes no later amendments or editions.) to convert sulfur dioxide or nitrogen oxide continuous emissions data to units of the applicable emission standard applicable to that source.

2) Sulfuric acid plants of greater than 300 tons per day production capacity, the production being expressed as 100 percent acid, shall monitor for sulfur dioxide at each point of sulfur dioxide emission.

3) Nitric acid plants of greater than 300 tons per day production capacity, the production capacity being expressed as 100 percent acid, located in an Air Quality Control Region where the Administrator, U.S. Environmental Protection Agency, has specifically determined pursuant to Section 107 of the Clean Air Act that a control strategy for nitrogen dioxide is necessary to attain the national standard, shall monitor for nitrogen oxides at each point of nitrogen oxide emission.

4) Petroleum refineries shall monitor for opacity at each catalyst regenerator for fluid bed catalytic cracking units of greater than 20,000 barrels per day fresh feed capacity.

b) Except for sources permitted to use alternative monitoring pursuant to Section 201.402, compliance with the Illinois emissions limitations by the owners and operators of emission sources required to monitor continuously shall be determined by the use of equipment which meets the performance specifications set forth in paragraphs 3.1 through 3.8 of 40 CFR 51, Appendix P, (1987) (this incorporation includes no later amendments or editions), and relevant portions of 35 Ill. Adm. Code 230, Appendix A and B.

(Source: Added at 13 Ill. Reg. 2066, effective February 3, 1989)

Section 201.402. Alternative Monitoring

Alternative monitoring requirements for sources subject to Section 201.401(a) shall be prescribed by permit upon a demonstration by the owner or operator that continuous monitoring is technically unreasonable or infeasible due to physical plant limitations or would impose an extreme economic burden. It shall be demonstrated that the installation, location or operation of a continuous monitoring system or device:

a) Would not provide accurate determinations of nitrogen dioxide, sulfur dioxide, carbon dioxide, percent oxygen, or opacity; or

b) Cannot be installed due to the facility's physical constraints such as size, space or strength of materials, or due to safety considerations; or

c) Would impose an extreme economic burden in proportion to the significance of the monitoring information which would be provided, in that the cost of monitoring would exceed the norm for similar sources and those costs would have a significant adverse effect on the profitability of the operations.

(Source: Added at 13 Ill. Reg. 2066, effective February 3, 1989)

Section 201.403. Exempt Sources

The following emission sources are exempt from the requirements of this Subpart:

a) Any source subject to monitoring requirements which are part of a new source performance standard adopted by USEPA pursuant to Section 111 of the Clean Air Act and made applicable in Illinois pursuant to Section 9.1 of the Act; or

b) Any source not subject to either the generally applicable emission limitation established pursuant to the Act or Board regulation or an alternative, adjusted or site specific standard approved by the Board.

(Source: Added at 13 Ill. Reg. 2066, effective February 3, 1989)

Section 201.404. Monitoring System Malfunction

The monitoring and recording requirements of this Subpart shall not be applicable during any period of a monitoring system or device malfunction if demonstrated by the owner or operator of the source that the malfunction was unavoidable and is being repaired as expeditiously as practicable. This demonstration may include, but is not limited to, evidence that the device has been properly calibrated and maintained, adequate spare parts are on hand, and trained technicians are available to make repairs.

(Source: Added at 13 Ill. Reg. 2066, effective February 3, 1989)

Section 201.405. Excess Emission Reporting

Owners and operators of sources subject to the continuous monitoring requirements of this Subpart shall report the following information:

a) For periods of emissions in excess of any emission limitation adopted by the Board:

1) The starting date and time of the excess emissions;

- 2) The duration of the excess emissions;
 - 3) The magnitude of excess emissions;
 - 4) The cause of the excess emission, if known;
 - 5) Corrective actions and actions taken to lessen the emissions;
 - 6) The operating status of the monitoring system, including the dates and times of any periods during which it was inoperative; and
 - 7) Other information, including but not limited to, monitor location, monitor maintenance records and source operating hours, which the Agency may require by permit.
- b) For gaseous sulfur dioxide, percent oxygen, or carbon dioxide measurements, the averaging period used for data reporting shall correspond to the averaging period used to determine compliance with the applicable emission limitation applicable to the source. The report shall consist of emission averages in the units of the applicable limitation for each averaging period during which the limitation was exceeded.
- c) For opacity measurements, the report shall be based on six minute averages of opacity and contain:
- 1) The percent opacity for each continuous opacity excess period; and
 - 2) The start and stop time in six minute increments of any opacity measurements in excess of the limitation.
- d) If there were no excess emissions during the reporting period, the report shall so state and include information about the operating status of the monitoring equipment during that period.
- e) Reports shall be submitted within 45 days of the end of every calendar quarter.

(Source: Added at 13 Ill. Reg. 2066, effective February 3, 1989)

Section 201.406 Data Reduction

To convert monitoring data to the units of the emission limitation, owners and operators of sources subject to this subpart shall use:

- a) The procedures specified in 35 Ill. Adm. Code 230 or in regulations adopted by the U.S. Environmental Protection Agency under Section 111 of the Clean Air Act and made applicable in Illinois pursuant to Section 9.1 of the Illinois Environmental Protection Act; or where necessary

- b) The procedures specified in 40 CFR 51, Appendix P, Paragraph 5 (1987). This incorporation includes no later amendments or editions; or
- c) Alternative measurement and data reduction methods may be utilized if demonstrated by the owner or operator of the affected source by means including, but not limited to, instrument accuracy tests that such alternative methods will provide information equivalent to the information which would be provided by the above methods.

(Source: Added at 13 Ill. Reg. 2066, effective February 3, 1989)

Section 201.407 Retention of Information

Owners and operators of sources which are subject to the monitoring and recording requirements of this Subpart shall maintain files of emission information at the facility and make the information available to the Agency upon request. This information shall be retained for at least two years from the date of collection, and shall include:

- a) Emission measurements;
- b) Continuous monitoring system performance testing measurements;
- c) Performance evaluations;
- d) Calibration checks;
- e) Maintenance and adjustments performed;
- f) Quarterly reports submitted pursuant to Section 201.405; and
- g) Data reduction information used pursuant to Section 201.406.

(Source: Added at 13 Ill. Reg. 2066, effective February 3, 1989)

Section 201.408 Compliance Schedules

Owners and operators of sources subject to Section 201.401 shall install all necessary equipment and monitor in accordance with the compliance schedule contained in the permit issued by the Agency. This schedule shall provide that monitoring and recording begin within 18 months of this Subpart being approved by the USEPA pursuant to Section 110(a)(3)(A) of the Clean Air Act as a revision to the State Implementation Plan, unless the owner or operator has been granted a variance pursuant to Section 35(a) of the Act allowing a longer compliance schedule.

(Source: Added at 13 Ill. Reg. 2066, effective February 3, 1989)

**Appendix A
Rule into Section Table**

Rule	Section
101	201.102
102	201.141
103(a)(1)	201.142
103(a)(2)	201.152
103(a)(3)	201.153
103(a)(4)	201.154
103(a)(5)	201.155
103(a)(6)	201.156
103(b)(1)	201.143
103(b)(2)	201.144
103(b)(3)	201.145
103(b)(4)	201.146
103(b)(5)	201.147
103(b)(6)(A-F)	201.148(a)
103(b)(6)(G)	201.148(b)
103(b)(7)	201.149
103(b)(8)	201.150
103(c)	201.151
103(d)	201.152
103(e)	201.153
103(f)	201.154
103(g)	201.155
103(h)	201.156
103(i)	201.157
103(j)	201.158
103(k)	201.159
104(a)(1)	201.160
104(a)(2)	201.161
104(a)(3)	201.162
104(b)(1)	201.163
104(b)(2)	201.164
104(b)(3)	201.165
104(c)	201.207
104(d)	201.209
104(e)	201.121
104(f)	201.146
104(g)	201.147
104(h)	201.210
105(a)	201.148(a)
105(b)	215.606, 215.182
105(c)	201.148(b)
105(d)	201.241, 215.213
105(e)	201.242(a)
105(f)	201.242(b)
105(g)	201.243
105(h)	201.244
106(a)	201.245
106(b)	201.246
106(c)	201.247
106(d)	201.248
106(e)	201.249
106(f)	201.250
106(g)	201.251
106(h)	201.252
106(i)	201.253
106(j)	201.254
106(k)	201.255
106(l)	201.256
106(m)	201.257
106(n)	201.258
106(o)	201.259
106(p)	201.260
106(q)	201.261
106(r)	201.262
106(s)	201.263
106(t)	201.264
106(u)	201.265
106(v)	201.266
106(w)	201.267
106(x)	201.268
106(y)	201.269
106(z)	201.270
107(a)	201.271
107(b)	201.272
108	201.273
109	201.274
110	201.275
111	201.276
112	201.277
113	201.278
114	201.279

Section	Rule
201.104	Added in Codification
201.121	103(b)
201.122	108
201.123	111
201.124	112
201.125	113
201.126	114
201.141	102
201.142	103(a)(1)
201.143	103(b)(1)
201.144	103(b)(2)
201.145	103(b)(3)
201.146	103(b)(4)
201.147	103(b)(5)
201.148(a)	103(b)(6)(A-F)
201.148(b)	103(b)(6)(G)
201.149	103(b)(7)
201.150	103(b)(8)
201.151	103(c)
201.152	103(d)
201.153	103(e)
201.154	103(f)
201.155	103(g)
201.156	103(h)
201.157	103(i)
201.158	103(j)
201.159	103(k)
201.160	104(a)(1)
201.161	104(a)(2)
201.162	104(a)(3)
201.163	104(b)(1)
201.164	104(b)(2)
201.165	104(b)(3)
201.207	104(c)
201.209	104(d)
201.210	104(e)
201.241	104(f)
201.242	104(g)
201.243	104(h)
201.244	105(a)
201.245	105(b)
201.246	105(c)
201.247	105(d)
201.248	105(e)
201.249	105(f)
201.250	105(g)
201.251	105(h)
201.252	105(i)
201.253	105(j)
201.254	105(k)
201.255	105(l)
201.256	105(m)
201.257	105(n)
201.258	105(o)
201.259	105(p)
201.260	105(q)
201.261	105(r)
201.262	105(s)
201.263	105(t)
201.264	105(u)
201.265	105(v)
201.266	105(w)
201.267	105(x)
201.268	105(y)
201.269	105(z)
201.270	106(a)
201.271	106(b)
201.272	106(c)
201.273	106(d)
201.274	106(e)
201.275	106(f)
201.276	106(g)
201.277	106(h)
201.278	106(i)
201.279	106(j)
201.280	106(k)
201.281	106(l)
201.282	106(m)
201.283	106(n)
201.284	106(o)
201.285	106(p)
201.286	106(q)
201.287	106(r)
201.288	106(s)
201.289	106(t)
201.290	106(u)
201.291	106(v)
201.292	106(w)
201.293	106(x)
201.294	106(y)
201.295	106(z)
201.296	107(a)
201.297	107(b)
201.298	107(c)
201.299	107(d)
201.300	107(e)
201.301	107(f)
201.302	107(g)
Appendix A	Added in Codification
Appendix B	Added in Codification
Appendix C	103(b)(2), 103(b)(6)(G)
	104(g)

**Appendix C
Past Compliance Dates**

Rule 103(b)(2)

Operating permits were required as follows:

Section	Rule	DATE OPERATING PERMIT REQUIRED
201.101	---	
201.102	101	Primary Metal Industry
201.103	Added in Codification	Operations as defined by

SOURCE CLASSIFICATION	DATE OPERATING PERMIT REQUIRED	SOURCE CLASSIFICATION	DATE OPERATING PERMIT REQUIRED
code 33 of the "Standard Industrial Classification Manual"	By December 1, 1972	Grain-Handling and Conditioning Operations	By March 1, 1976
Rubber and Plastics Products Industry Operations as defined by code 30 of the "Standard Industrial Classification Manual"	By December 1, 1972	Grain-Handling and Grain-Drying Operations	By March 1, 1976
Chemicals and Allied Products Industry Operations as defined by code 28 of the "Standard Industrial Classification Manual"	By January 1, 1973	(B) All applications for operating permits shall be submitted to the Agency at least 90 days prior to the date on which an operating permit is required. Provided, however, the Agency may waive this 90-day requirement when appropriate. If necessary, to prevent an unmanageable workload as may be deemed appropriate, the Agency may extend the dates by which operating permits are required under Rule 103(b)(2)(A) for a period not to exceed four months. The Agency shall notify the persons affected and the Board in writing of the extension at least four months before the dates set forth in Rule 103(b)(2)(A).	
Food and Kindred Products Industry Operations as defined by code 20 and Printing and Publishing Industry Operations as defined by code 27 of the "Standard Industrial Classification Manual"	By February 1, 1973	(C) Nothing in this rule shall preclude any person from applying for an operating permit earlier than the dates specified in subparagraph (b)(2)(A) of this Rule 103.	
Petroleum and Coal Products Industry Operations as defined by code 29 of the "Standard Industrial Classification Manual" and bituminous cement (asphalt) plants	By February 1, 1973	Rule 103(b)(6)(C) No operating permit could be granted unless the applicant submitted proof to the Agency that:	
Stone, Clay and Glass Products and Paper and Allied Products Industry Operations as defined by codes 32 and 26 of the "Standard Industrial Classification Manual" and all painting operations using in excess of 5,000 gallons of paint (including thinner) per year	By March 1, 1973	if subject to a future compliance date, the applicant was, on the effective date of this Chapter, and is at the time of application for an operating permit pursuant to Rule 103(b)(2), in compliance with any applicable emission standards of the Rules and Regulations Governing the Control of Air Pollution of the former State of Illinois Air Pollution Control Board, or was, on the effective date of this Chapter, in full compliance with any variance from those regulations granted by the Pollution Control Board; or has been, since the effective date of this Chapter, granted a variance from those regulations, and is in full compliance with such variance.	
Incinerators	By April 1, 1973	Rule 104(g) Submission and Approval Dates. The owner or operator of an emission source subject to the following rules was required to have a compliance plan and a project completion schedule, where applicable, approved by the Agency by the following dates. A compliance plan and a project completion schedule, where applicable, shall be submitted at least 90 days before the following dates.	
Electric, Gas and Sanitary Services as defined by code 49 of the "Standard Industrial Classification Manual" and coal fired boilers	By May 1, 1973	(1) By February 1, 1980. Gasoline dispensing facilities subject to Rule 203(c) and	
Gas and Oil fired boilers and all other emission sources or air pollution control equipment not listed previously in this paragraph except equipment excluded under paragraph (i) of this Rule	By June 1, 1973		

degreasers subject to Rule 205(k) located in Cook, DuPage, Lake, Kane, McHenry and Will counties.

(2) By March 1, 1980. Petroleum refineries subject to Rule 205(l), except (l)(4)-(10). Gasoline dispensing facilities subject to Rule 205(p) in Boone, Madison, St. Clair, Peoria, Tazewell, Rock Island and Winnebago counties.

(3) By April 1, 1980. Degreasers subject to Rule 205(k) located in counties other than Cook, DuPage, Lake, Kane, McHenry or Will. Bulk gasoline plants, bulk gasoline terminals and petroleum liquid storage tanks subject to Rule 205(o), except (o)(3), located in Cook, DuPage, Lake, Kane, McHenry and Will counties.

(4) By April 1, 1980. Coating lines subject to Rule 205(n), except (n)(1)(J) and (K). Bulk gasoline plants, bulk gasoline terminals and petroleum liquid storage tanks subject to Rule 205(o), except (o)(3), which are located in counties other than Cook, Lake, DuPage, Kane, McHenry or Will.

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

CHAPTER 1: POLLUTION CONTROL BOARD

**SUBCHAPTER a: PERMITS AND
GENERAL PROVISIONS**

**PART 202
ALTERNATIVE CONTROL STRATEGIES**

SUBPART A: GENERAL PROVISIONS

Section	
202.101	Definitions
202.104	Actual Emissions
202.107	Allowable Emissions
202.110	Alternative Control Strategy (ACS)
202.113	Chapter
202.116	Emission Baseline
202.119	Multi-person ACS
202.122	Potential to Emit
202.125	Abbreviations
202.140	Scope
202.142	Severability

SUBPART B: PERMIT APPLICATION

Section	
202.201	Emission Baseline for Alternative Control Strategies
202.210	Permit Application Information
202.211	Analysis of Emissions
202.212	Analysis of Environmental Quality
202.213	Analysis of Methods of Assuring Compliance

SUBPART C: PERMIT CONDITIONS AND ISSUANCE

Section	
202.301	Permit Conditions
202.302	Records and Reports
202.303	Monitoring and Testing
202.304	Compliance Dates
202.305	Public Participation
202.306	Standards for Issuance
202.307	Notification to USEPA

**SUBPART D: PERMIT DURATION, REVISION
AND RENEWAL**

Section	
202.401	Duration
202.402	Revision
202.403	Renewal

**SUBPART E: ALTERNATIVE CONTROL STRATEGIES
INVOLVING MORE THAN ONE PERSON**

Section	
202.501	Applicability
202.502	Permit Application
202.503	Duration
202.504	Permit Conditions
202.505	Records and Reports
202.506	Revocation
202.507	Termination

Appendix A: Pre-Codification into Codified
Appendix B: Codified into Pre-Codification

AUTHORITY: Implementing Section 9.3 and authorized by Sections 5 and 27 of the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1005, 1009.3, and 1027).

SOURCE: 35 Ill. Adm. Code 212 adopted in R81-20 (Interim) at 6 Ill. Reg. 6703, effective May 20, 1982; renumbered to 35 Ill. Adm. Code 202 and amended in R81-20(A) at 7 Ill. Reg. 8091, effective June 27, 1983; codified at 7 Ill. Reg. 13584; corrected at 7 Ill. Reg. 14561; amended in R81-20(B) at 8 Ill. Reg. 4171, effective March 16, 1984.

SUPART A: GENERAL PROVISIONS

Section 202.101 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 this Chapter, 35 Ill. Adm. Code: Subtitle B, Chapter 1 (Chapter).

Section 202.104 Actual Emissions

"Actual emissions" means 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 Illinois Environmental Protection Agency (Agency) to be representative of normal emission source operation; however:

- 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.
- If the Agency determines that there is inadequate information to determine actual emissions as indicated in the preceding paragraphs, the Agency shall use the potential to emit of the emission source.

Section 202.107 Allowable Emissions

- "Allowable emissions" means the emission rate of an emission source calculated using the maximum rated capacity of the emission source (unless the emission source is subject to permit conditions or other enforceable limits which restrict the operating rate, or hours of operation, or both) and the more 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 throughput.
- c) Allowable emissions shall include a reasonable estimate of emissions in excess of applicable standards during start-up, malfunction, or breakdown, as appropriate, only if the applicable provisions of 35 Ill. Adm. Code 201 have been complied with.
- d) If an emission source is not subject to an emission standard under subsection (a) and is not conditioned pursuant to subsection (b), the allowable emissions shall be the source's potential to emit.

Section 202.110 Alternative Control Strategy (ACS)

"Alternative control strategy" means 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.

Section 202.113 Chapter

References to "this Chapter" or "Chapter 2" in this Part shall mean Pollution Control Board (Board) air pollution rules and regulations as contained in Chapter 2: Air Pollution Regulations and as codified under 35 Ill. Adm. Code: Subtitle B, Chapter I.

Section 202.116 Emission Baseline

"Emission baseline" means 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 ACS strategies specify the particular emission baseline that applies for that purpose.

Section 202.119 Multi-person ACS

"Multi-person ACS" means an ACS which includes emission sources which are owned and controlled by different persons who have formed a joint venture for purposes of the ACS.

Section 202.122 Potential to Emit

"Potential to emit" means the maximum capacity of an emission source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the emission 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.

Section 202.125 Abbreviations

"ug" is an abbreviation for micrograms.

"m³" is an abbreviation for cubic meter.

"SO₂" is an abbreviation for sulfur dioxide.

"TSP" is an abbreviation for particulate matter.

"NO_x" is an abbreviation for nitrogen oxides.

"CO" is an abbreviation for carbon monoxide.

Section 202.140 Scope

Pursuant to a permit issued by the Agency under this Part, a person or persons may use an ACS for emission sources, including fugitive emission sources, in lieu of compliance with conflicting requirements which would otherwise be applicable under this Chapter.

Section 202.142 Severability

Notwithstanding 35 Ill. Adm. Code 201.125, if any provision of Part 202 is stayed or declared invalid by a final order, no longer subject to appeal, of any court of competent jurisdiction, then the entirety of Part 202 shall be deemed stayed or invalidated until the stay is lifted or the Board acts to revalidate the Part.

SUBPART B: PERMIT APPLICATION

Section 202.201 Emission Baseline for Alternative Control Strategies

a) The baseline for reviewing decreases or increases of emissions from emission sources which are the subject of an ACS 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, changes in process, procedures, or materials, or the shutdown of an emission source which would not have occurred but for the purpose of creating an emission reduction;
 - 2) Reduced emissions beyond the requirements of Board regulations; and
 - 3) Was not relied upon in the State Implementation Plan (SIP) demonstration to demonstrate compliance with ambient air quality standards in the compliance year in nonattainment areas or maintenance of air quality in other areas.
- c) For purposes of subsection (b), the burden shall generally be on the permit applicant. However, for the purpose of subsection (b)(3) it shall be the responsibility of the Agency to demonstrate that the SIP demonstration either did or did not rely upon the emission reduction in question, whether from the particular emission source or the category to which it belongs.
- d) Notwithstanding subsection (b)(3), if an emission source is located in an area for which the SIP does not demonstrate attainment of the air quality standards by the compliance year for the pollutant which is the subject of the ACS, it may utilize an emission reduction credit only to the extent that that reduction reduces its emissions below actual emissions.

(Source: Amended at 7 Ill. Reg. 8091, effective June 27, 1983)

Section 202.210 Permit Application Information

In addition to other information which may be required under 35 Ill. Adm. Code 201, a permit application under this Subpart shall:

- a) List the emission sources to be included in the ACS, the emission baseline the applicant believes to be applicable to each emission source, and the remaining useful life of 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 (Act) (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1001 et seq.) 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, but are not limited to recordkeeping, equipment or emissions monitoring, source testing, and material or process specifications.

- e) Provide an analysis of the ACS pursuant to this Subpart.
- f) Contain a certification, signed by all ACS applicants, stating that a copy of the ACS application has been sent by certified mail to the United States Environmental Protection Agency (USEPA) if any of the emission sources included in the ACS are presently the subject of a federal notice of violation or federal enforcement action under the provisions of the Clean Air Act (42 U.S.C. 7401 et seq.), including civil actions filed under Section 113(b), criminal actions filed under Section 113(c), a notice imposing non-compliance penalties issued under Section 120, administrative orders issued under Section 113(a), or a citizen suit filed under Section 304 where the USEPA has intervened (42 U.S.C. 7413 and 7420).
- g) Provide such other information as the Agency can demonstrate to be necessary for the determination of compliance with the standards of issuance in Section 202.306, including the results of any source tests or ambient air monitoring.

(Source: Amended at 7 Ill. Reg. 8091, effective June 27, 1983)

Section 202.211 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 the proposed ACS.

Section 202.212 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 based on the best and most appropriate models for the pollutant and emission sources involved, unless the Agency finds that:

- 1) Due to the characteristics of the pollutant and emission source, 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, the effective plume height of the emission increases and decreases are not significantly different and the differences in the characteristics of the emission sources are not likely to affect ambient air quality; 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

Pollutant	Annual	24-Hour	8-Hour	1-Hour	1-Hour
SO ₂	1.0 ug/m ³	5 ug/m ³		25 ug/m ³	
TSP	1.0 ug/m ³	5 ug/m ³			
NO _x	1.0 ug/m ³				
CO		0.5 mg/m ³		2 mg/m ³	

- b) The applicant shall analyze the air quality impacts resulting from trades between emission sources, including the impact of emissions which differ in their qualitative impact on health or the environment.
- c) The analysis shall describe any other impacts on the environment which may accompany the proposed ACS.

Section 202.213 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.

SUBPART C: PERMIT CONDITIONS AND ISSUANCE

Section 202.301 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 may 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 202.302 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 shall 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 Sections 7 and 7.1 of the Act (Ill. Rev. Stat. 1987, ch. III 7/2, pars. 1007 and 1007.1) 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.

Section 202.303 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 202.304 Compliance Dates

a) No owner or operator subject to a permit utilizing an ACS 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 35 Ill. Adm. Code 215 pursuant to an Agency approved alternative compliance plan contained in a permit utilizing an ACS which is applied for prior to December 31, 1982. The Agency shall approve such an alternative compliance plan if, and only if, the applicant demonstrates that:

- 1) The alternative compliance plan 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 emission source belongs to a category of emission sources having a compliance date of December 31, 1982 or later under 35 Ill. Adm. Code 215;
- 3) The use of an ACS will result in either greater or faster overall emission reductions than would otherwise be achieved; and
- 4) Such extension is consistent with the requirements of the Clean Air Act.

Section 202.305 Public Participation

The initial issuance of a permit containing an ACS shall be subject to applicable Agency public participation procedures (35 Ill. Adm. Code 166) prior to issuance. At a minimum, the Agency shall provide an opportunity for public comment.

Section 202.306 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 equivalent to those that are associated with otherwise applicable requirements.

d) The ACS complies with any applicable requirements contained in 35 Ill. Adm. Code 203, 230 or 231.

e) USEPA has not disapproved the proposed ACS or any compliance schedule it may contain due to the existence of a federal enforcement action pending against a participant in the ACS.

f) The ACS does not permit an increase in emissions of any pollutant which is listed or regulated pursuant to Section 112 of the Clean Air Act (42 U.S.C. 7412 et seq.).

(Source: Amended at 7 Ill. Reg. 8091, effective June 27, 1983)

Section 202.307 Notification to USEPA

Upon issuance of an ACS permit, the Agency shall notify USEPA of emission limitations, alternative compliance plans, and any other permit conditions applicable to emission sources under an ACS.

(Source: Amended at 7 Ill. Reg. 8091, effective June 27, 1983)

SUBPART D: PERMIT DURATION, REVISION AND RENEWAL

Section 202.401 Duration

a) 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. However, an ACS permit may not be issued for a period of time which is greater than the useful life of an emission source which contributes an emission reduction to the ACS. The burden of proving the useful life of the emission source is on the applicant.

b) Upon the initial issuance or renewal of an ACS permit, the Agency shall consider all factors which it reasonably construes as bearing upon the useful life of an emission source which contributes an emission reduction to the ACS. Where a shutdown emission source contributes an emission reduction to an ACS, the Agency shall specify the useful life of the shutdown emission source in a permit condition. Factors which the Agency considers shall include, as a minimum:

- 1) The anticipated useful life of the principal components of the emission source upon purchase;
 - 2) The physical condition of the principal components of the emission source;
 - 3) The technological acceptability of the emission source;
 - 4) The economic viability of the emission source; and
 - 5) The demonstrated useful life of emission sources of the same category or functional type.
- c) The Agency shall make a record of the factors considered and the basis for its initial or modified determination of useful life made pursuant to subsection (b).

(Source: Amended at 8 Ill. Reg. 4171, effective March 16, 1984)

Section 202.402. 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 202.210 which is necessary to show that the revised ACS will meet the standards of permit issuance specified in Section 202.306.
- 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 202.305.

Section 202.403. 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 Section 202.210. However, an analysis of the effect of the ACS on air quality pursuant to Section 202.212 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 include a change in the applicable emission limit or operation of the source or may otherwise 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 202.305.

(Source: Amended at 7 Ill. Reg. 8091, effective June 27, 1983)

SUBPART 2. ALTERNATIVE CONTROL STRATEGIES INVOLVING MORE THAN ONE PERSON

Section 202.501. Applicability

Persons who propose or participate in a multi-person ACS shall be subject to the rules found in this Subpart in addition to the remainder of this Part.

Section 202.502. Permit Application

In addition to the information required in Section 212.210, 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 and to be jointly bound by the terms and conditions of any permits which are issued pursuant to the application.

Section 202.503. Duration

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

Section 202.504. 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 202.505. Records and Reports

All records and reports of the participants in a multi-person ACS which are not confidential in nature shall be available for inspection to the

other participants upon reasonable notice of a request to inspect.

Section 202.506 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 202.507 Termination

- a) If a participant in a multi-person ACS intends to terminate involvement in the ACS, it shall give written notice to the Agency and 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 120 days before new permits are required; or
 - 2) Apply for revised permits, pursuant to the otherwise applicable regulations in this Chapter; such applications shall be submitted at least 90 days before the permits are required; or
- c) If the notice of termination of the multi-person ACS does not allow sufficient time to meet the time periods in subsection (b) above, the participants may seek variance relief from the Board from the requirements of this Chapter and of the Act.

Appendix A Pre-Codification into Codified

Pre-Codification Section Section

202.101	202.101
202.101	202.104
202.101	202.107
202.101	202.110
202.101	202.113
202.101	202.116
202.101	202.119
202.101	202.122
202.101	202.125
202.102	202.140
202.105	202.201
202.110	202.210
202.111	202.211
202.112	202.212
202.113	202.213
202.120	202.306
202.125	202.305
202.130	202.304
202.140	202.302
202.145	202.401
202.150	202.301

Pre-Codification Section Section

202.155	202.303
202.157	202.307
202.160	202.402
202.165	202.403
202.190	202.142
202.201	202.501
202.202	202.502
202.204	202.503
202.206	202.504
202.208	202.505
202.210	202.506
202.211	202.507

Appendix B Codified into Pre-Codification

Pre-Codification Section Section

202.101	202.101
202.104	202.101
202.107	202.101
202.110	202.101
202.113	202.101
202.116	202.101
202.119	202.101
202.122	202.101
202.125	202.101
202.140	202.102
202.142	202.190
202.201	202.105
202.210	202.110
202.211	202.111
202.212	202.112
202.213	202.113
202.301	202.150
202.302	202.140
202.303	202.155
202.304	202.130
202.305	202.125
202.306	202.120
202.307	202.157
202.401	202.145
202.402	202.160
202.403	202.165
202.501	202.201
202.502	202.202
202.503	202.204
202.504	202.206
202.505	202.208
202.506	202.210
202.507	202.211

Appendix A
Appendix B

Added in Codification
Added in Codification

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE 6: AIR POLLUTION

CHAPTER 1: POLLUTION CONTROL BOARD

**SUBCHAPTER 2: PERMITS AND
GENERAL PROVISIONS**

**PART 203
MAJOR STATIONARY SOURCES CONSTRUCTION
AND MODIFICATION**

SUBPART A: GENERAL PROVISIONS

Section	
203.101	Definitions
203.103	Actual Construction
203.104	Actual Emissions
203.107	Allowable Emissions
203.110	Available Growth Margin
203.112	Building, Structure and Facility
203.113	Commence
203.116	Construction
203.117	Dispersion Enhancement Techniques
203.119	Emission Baseline
203.122	Emission Offset
203.123	Emissions Unit
203.124	Fugitive Emissions
203.125	Installation
203.126	LAER
203.127	Nonattainment Area
203.128	Potential to Emit
203.131	Reasonable Further Progress
203.134	Secondary Emissions
203.136	Stationary Source
203.145	Volatile Organic Compound
203.150	Public Participation
203.155	Severability (Repealed)

**SUBPART B: MAJOR STATIONARY
SOURCES IN NONATTAINMENT AREAS**

Section	
203.201	Prohibition
203.202	Coordination with Permit Requirement and Application Pursuant to 35 Ill. Adm. Code 201
203.203	Construction Permit Requirement and Application
203.204	Duration of Construction Permit (Repealed)
203.205	Effect of Permits
203.206	Major Stationary Source
203.207	Major Modification of a Source
203.208	Net Emission Determination
203.209	Significant Emissions Determination
203.210	Relaxation of a Source-Specific Limitation
203.211	Permit Exemption Based on Fugitive Emissions

**SUBPART C: REQUIREMENTS FOR MAJOR
STATIONARY SOURCES
IN NONATTAINMENT AREAS**

Section	
203.301	Lowest Achievable Emission Rate
203.302	Maintenance of Reasonable Further Progress and Emission Offsets
203.303	Baseline and Emission Offsets Determination

203.304	Exemptions from Emissions Offset Requirement (Repealed)
203.305	Compliance by Existing Sources
203.306	Analysis of Alternatives

**SUBPART F: OPERATION OF A MAJOR STATIONARY
SOURCE OR MAJOR MODIFICATION**

Section	
203.601	Lowest Achievable Emission Rate Compliance Requirement
203.602	Emission Offset Maintenance Requirement
203.603	Ambient Monitoring Requirement (Repealed)

**SUBPART G: GENERAL MAINTENANCE OF
EMISSION OFFSETS**

Section	
203.701	General Maintenance of Emission Offsets

AUTHORITY: Implementing Section 9.1 and
authorized by Sections 5 and 27 of the
Environmental Protection Act (Ill. Rev. Stat.
1981, ch. 111 1/2, pars. 1005, 1009.1 and 1027).

SOURCE: Adopted and codified at 7 Ill. Reg.
9344, effective July 22, 1983; codified at 7
Ill. Reg. 13588; amended in R85-20 at 12 Ill.
Reg. 6118, effective March 22, 1988.

SUBPART A: GENERAL PROVISIONS

Section 203.101 Definitions

Unless a different meaning of the 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 (Board) Rules and
Regulations, 35 Ill. Adm. Code 201 and 211.

Section 203.103 Actual Construction

"Actual Construction" means in general,
initiation of physical on-site construction
activities on an emissions unit which are of a
permanent nature. Such activities include, but
are not limited to, installation of building
supports and foundations, laying of underground
pipework, and erection of permanent storage
structures. With respect to a change in method
of operation, this term refers to those on-site
activities other than preparatory activities
which mark the initiation of the change.

(Source: Added at 12 Ill. Reg. 6118, effective
March 22, 1988)

Section 203.104 Actual Emissions

"Actual Emissions" means the actual rate of
annual emissions of a pollutant from an
emissions unit as of a particular date. Actual
emissions are equal to the average rate in tons
per year, at which the emissions unit actually
emitted the pollutant during the two-year period

which immediately precedes the particular date or such other period which is determined by the Illinois Environmental Protection Agency (Agency) to be representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored or combusted during the selected time period; however:

a) The Agency shall allow the use of a different time period upon a demonstration by the applicant to the Agency that the time period is more representative of normal source operation. Such demonstration may include, but need not be limited to, operating records or other documentation of events or circumstances indicating that the preceding two years is not representative of normal source operations.

b) The Agency may presume, in the absence of reliable data on actual emissions that the source-specific allowable emissions for the emissions unit are equivalent to the actual emissions of the emissions unit.

c) For any emissions unit which has not begun normal operations on the particular date, the Agency shall presume that the potential to emit of the emissions unit is equivalent to the actual emissions on that date.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.107 Allowable Emissions

a) "Allowable Emissions" means the emission rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to enforceable permit conditions or other such enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

1) Any applicable standards adopted by USEPA pursuant to Sections 111 and 112 of the Clean Air Act (42 U.S.C. 7401, et seq.) and made applicable in Illinois pursuant to Section 9.1 of the Environmental Protection Act (Act) (Ill. Rev. Stat. 1985, ch. 111 1/2, pars. 1001 et seq.);

2) The applicable emission standards or limitations contained in this Chapter and approved by the United States Environmental Protection Agency (USEPA) pursuant to Section 110(a)(2) or 110(a)(3) of the Clean Air Act, including those standards or limitations with a future compliance date and any other emission standard or limitation enforceable under the Environmental Protection Act or by the USEPA under Section 113 of the Clean Air Act; or

3) The emissions rate specified as an enforceable permit condition including those emissions rates with a future compliance date.

b) The allowable emissions may be based on an enforceable permit condition limiting material or fuel throughput.

c) If a source is not subject to an emission standard described in subsection (a) and is not subject to a permit condition described in subsection (b), the allowable emissions shall be the source's potential to emit.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.110 Available Growth Margin

"Available Growth Margin" means the portion which remains of any emission allowance for new or modified major stationary sources expressly identified in the attainment demonstration approved by the U.S. Environmental Protection Agency (USEPA) under Section 172(b)(5) of the Clean Air Act (42 U.S.C. 7502(b)(5)) for a particular pollutant and area.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.112 Building, Structure and Facility

a) The terms "building", "structure", and "facility" include all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same "Major Group" (i.e., which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (U.S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively) incorporated by reference in 35 Ill. Adm. Code 720.111.

b) The terms "building", "structure", and "facility" shall also include:

1) the transfer of materials, including but not limited to grain, gasoline, petroleum liquids, coal fertilizer, crushed stone and ore, from vessels, motor vehicles or other conveyances, irrespective of ownership or industrial grouping, to or from a building, structure, or facility as defined in subsection (a); and

2) activities at or adjacent to such building, structure or facility which are associated with such transfer, including but not limited to idling of propulsion engines, the operation of engines to provide heat, refrigeration or lighting, operating of auxiliary engines for pumps or cranes, and transfer of materials from hold to hold or tank to tank during onloading or offloading operations.

(Source: Added at 12 III. Reg. 6118, effective March 22, 1988)

Section 203.111 Commence

As applied to construction of a major stationary source or major modification "commence" means that the owner or operator has obtained all necessary preconstruction approvals or permits and either has:

- a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
- b) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.
- c) For purposes of this Section, a "reasonable time" shall be determined considering but not limited to the following factors: The nature and size of the project, the extent of design engineering, the amount of off-site preparation, whether equipment can be fabricated or can be purchased, when the project begins (considering both the seasonal nature of construction activity and the existence of other projects competing for construction labor at the same time, the place of the environmental permit in the sequence of corporate and overall governmental approval), and the nature of the permittee (private, public, regulated, etc.).

(Source: Amended at 12 III. Reg. 6118, effective March 22, 1988)

Section 203.116 Construction

"Construction" means any physical change or change in the method of operation, including but not limited to fabrication, erection, installation, demolition, or modification of an emissions unit, which would result in a change in actual emissions.

(Source: Amended at 12 III. Reg. 6118, effective March 22, 1988)

Section 203.117 Dispersion Enhancement Techniques

"Dispersion Enhancement Techniques" means so much of the stack height of any source as exceeds good engineering practice or any other dispersion technique, determined by regulations at 40 CFR 51.100 (1987) (no future amendments or editions are included).

(Source: Added at 12 III. Reg. 6118, effective March 22, 1988)

Section 203.119 Emission Baseline

"Emission baseline" means the starting point or reference level from which increases and decreases in emissions are measured. The rules governing determination of emission offsets, calculations of net emission increases, and evaluation under 35 III. Adm. Code 202, Alternative Control Strategies, specify the particular emission baseline that applies for that purpose.

Section 203.122 Emission Offset

"Emission offset" means a creditable emission reduction used to compensate for the increase in emissions resulting from a new major source or a major modification.

Section 203.123 Emissions Unit

"Emissions Unit" means any part of a stationary source which emits or has the potential to emit any pollutant subject to regulation under the Act or this Chapter or by USEPA under the Clean Air Act (42 U.S.C. 7401, the Act or et seq.).

(Source: Added at 12 III. Reg. 6118, effective March 22, 1988)

Section 203.124 Fugitive Emissions

"Fugitive Emissions" means those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.

(Source: Added at 12 III. Reg. 6118, effective March 22, 1988)

Section 203.125 Installation

"Installation" means an identifiable piece of equipment, including, but not limited to, boilers, furnaces, reactors, dryers, incinerators, heaters, and coating lines.

(Source: Former Section 203.125 renumbered to Section 203.126; new Section 203.125 adopted at 12 III. Reg. 6118, effective March 22, 1988)

Section 203.126 LAER

"LAER" is an abbreviation for lowest achievable emission rate.

(Source: Section 203.126 renumbered from Section 203.125 at 12 III. Reg. 6118, effective March 22, 1988)

Section 203.127 Nonattainment Area

An area designated by USEPA as nonattainment for a given pollutant pursuant to Section 107 of the Clean Air Act (42 U.S.C. 7407).

(Source: Added at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.128 Potential to Emit

"Potential to Emit" means 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.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.131 Reasonable Further Progress

"Reasonable Further Progress" means the annual incremental reductions in the emissions of the applicable air pollutant as determined by USEPA pursuant to Part D of the Clean Air Act (42 U.S.C. 7501 et seq.) and federal regulations adopted pursuant thereto.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.134 Secondary Emissions

"Secondary Emissions" means the emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purpose of this Part, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions may include, but are not limited to, emissions from any off-site support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.136 Stationary Source

"Stationary Source" means any building, structure, facility or installation which emits or may emit any air pollutant subject to regulation under the Act or this Chapter or by USEPA under the Clean Air Act (42 U.S.C. 7401 et seq.).

(Source: Added at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.145 Volatile Organic Compound

"Volatile Organic Compound" means any chemical compound of carbon, released to or present in the atmosphere in a gaseous state, including compounds which are liquids at standard conditions, but excluding the following compounds: methane, ethane, carbon monoxide, carbon dioxide, carbonic acid, metal carbides, metal carbonates, ammonium carbonate; 1,1,1-trichloroethane (methylchloroform), methylene chloride, trichlorotrifluoroethane (Freon 113), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), chlorodifluoromethane (CFC-22), trifluoromethane (FC-23), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), chloropentafluoroethane (CFC-115). Standard conditions means a temperature of 70°F and a pressure of 14.7 pounds per square inch absolute (psia).

(Source: Added at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.150 Public Participation

Prior to the initial issuance of a permit pursuant to Subpart B, the Agency shall provide at a minimum, notice of the proposed issuance of a permit and a comment period pursuant to the Agency public participation procedures found at 35 Ill. Adm. Code 166.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.155 Severability (Repealed)

(Source: Repealed at 12 Ill. Reg. 6118, effective March 22, 1988)

SUBPART B: MAJOR STATIONARY EMISSIONS SOURCES IN NONATTAINMENT AREAS

Section 203.201 Prohibition

In any nonattainment area, no person shall cause or allow the construction of a new major stationary source or major modification that is major for the pollutant for which the area is designated a nonattainment area, except as in compliance with this Part for that pollutant.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.202 Coordination with Permit Requirement and Application Pursuant to 35 Ill. Adm. Code 201

For new major sources and major modifications, the fulfillment of the requirements of 35 Ill. Adm. Code 201 related to construction, including the permit requirements of 35 Ill. Adm. Code

201.142. shall be combined with the requirements of this Subpart.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.203 Construction Permit Requirement and Application

- a) A construction permit is required prior to actual construction of a major new source or major modification.
- b) Applications for construction permits required under this Section shall contain sufficient information to demonstrate compliance with 35 Ill. Adm. Code 201 and the requirements of this Subchapter including, but not limited to, Subpart C.
- c) The permit shall include conditions specifying the manner in which the requirements of Subparts B and C of this Part are satisfied.
- d) No permittee shall violate any condition contained in a construction permit issued for a new major stationary source or major modification which is subject to this Part.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.204 Duration of Construction Permit (Repealed)

(Source: Repealed at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.205 Effect of Permits

The issuance of a permit for a source subject to the requirements of this Part shall not relieve any person of the responsibility to comply fully with applicable provisions of the Environmental Protection Act (Act) (Ill. Rev. Stat. 1985, ch. 111 1/2, pars. 1001 et seq.), this Chapter, and any other applicable requirements under local, state or federal law.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.206 Major Stationary Source

- a) The following constitutes a major stationary source:
 - 1) Any stationary source of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any pollutant for which pollutant the area is a nonattainment area.
 - 2) Any physical change that would occur at a stationary source not qualifying under paragraph 1 as a major stationary source, if the change would constitute a major stationary source by itself.

b) A major stationary source that is a major for volatile organic compounds shall be considered major for ozone.

c) The reconstruction of a major stationary source will be treated as the construction of a new major stationary source if the fixed capital cost of new components exceeds approximately half of the fixed capital cost of an entirely new stationary source. Determining whether reconstruction will occur is based on the following:

- 1) Fixed capital cost shall mean the capital needed to provide all the depreciable components;
- 2) The fixed capital cost for the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new source;
- 3) The estimated life of the source after the replacements compared to the life of a comparable entirely new source; and
- 4) The extent to which the components being replaced cause or contribute to the emissions from the source.

d) For purposes of this Part, the fugitive emissions of a stationary source shall not be included in determining whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:

- 1) Coal cleaning plants (with thermal dryers);
- 2) Kraft pulp mills;
- 3) Portland cement plants;
- 4) Primary zinc smelters;
- 5) Iron and steel mills;
- 6) Primary aluminum ore reduction plants;
- 7) Primary copper smelters;
- 8) Municipal incinerators capable of burning more than 250 tons of refuse per day;
- 9) Hydrofluoric, sulfuric, or nitric acid plants;
- 10) Petroleum refineries;
- 11) Lime plants;
- 12) Phosphate rock processing plants;
- 13) Coke oven batteries;
- 14) Sulfur recovery plants;
- 15) Carbon black plants (furnace process);
- 16) Primary lead smelters;
- 17) Fuel conversion plants;
- 18) Sintering plants;
- 19) Secondary metal production plants;
- 20) Chemical process plants;
- 21) Fossil-fuel boilers (or combination thereof) totaling more than 250 million Btu per hour heat input;
- 22) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- 23) Taconite ore processing plants;
- 24) Glass fiber processing plants;
- 25) Charcoal production plants;

- 26) Fossil fuel-fired steam electric plants of more than 250 million Btu per hour heat input;
- 27) Any other stationary source category which was regulated as of August 7, 1980, by USEPA under Section 111 or 112 of the Clean Air Act (42 U.S.C. 7411, 7412).

(Source: Amended at 12 ILL. Reg. 6118, effective March 22, 1988)

Section 203.207 Major Modification of a Source

- a) Except as provided in Subsection (c), a physical change, or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant for which the area is designated a nonattainment area, shall constitute a major modification of a source.
- b) Any net emissions increase that is significant for volatile organic compounds shall be considered significant for ozone.
- c) A physical change or change in the method of operation shall not include:
 - 1) Routine maintenance, repair, and replacement which does not constitute reconstruction pursuant to Section 203.206(c).
 - 2) Use of an alternative fuel or raw material by reason of any order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (15 U.S.C. 791), the Power Plant and Industrial Fuel Use Act of 1978 (42 U.S.C. 8301) (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act (16 U.S.C. 791, et seq.).
 - 3) Use of an alternative fuel by reason of an order or rule under Section 125 of the Clean Air Act (42 U.S.C. 7425).
 - 4) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.
 - 5) Use of an alternative fuel or raw material by a stationary source which:
 - A) Was capable of accommodating such alternative fuel or raw material before December 21, 1976, and which has continuously remained capable of accommodating such fuels or materials unless such change would be prohibited under any enforceable permit condition established after December 21, 1976, pursuant to 40 CFR 52.21, this Part, or 35 ILL. Adm. Code 201.142 or 201.143, or
 - B) Is approved for use under any permit issued pursuant to this Part or 35 ILL. Adm. Code 201.142 or 201.143.

- 6) An increase in the hours of operation or in the production rate, unless such change is prohibited under any enforceable permit condition which was established after December 21, 1976 pursuant to 40 CFR 52.21, this Part, or 35 ILL. Adm. Code 201.142 or 201.143.

- 7) Any change in ownership at a stationary source.

(Source: Amended at 12 ILL. Reg. 6118, effective March 22, 1988)

Section 203.208 Net Emission Determination

A net emissions increase is the amount by which the sum of any increase in actual emissions from a particular physical change or change in method of operation at a source, and any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable, exceeds zero. The following steps determine whether the increase or decrease in emissions is available.

- a) An increase or decrease in actual emissions is contemporaneous only if it occurs between the date that an increase from a particular change occurs and the date five years before a timely and complete application is submitted for the particular change. It must also occur after either April 24, 1979, or the date the area is designated by the U.S. Environmental Protection Agency (USEPA) as a nonattainment area for the pollutant, whichever is more recent.
- b) An increase or decrease in actual emissions is creditable:
 - 1) Only if there is not in effect for the source at the time the particular change occurs, a permit which relied on the same increase or decrease in actual emissions; and
 - 2) Only to the extent the new and old levels differ.
- c) A decrease in actual emissions is creditable to the extent that:
 - 1) It is enforceable at and after the time that actual construction on the particular change begins;
 - 2) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change;
 - 3) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions; and
 - 4) It is demonstrated by the Agency not to have been previously relied on in issuing any permit pursuant to this part or 35 ILL. Adm. Code 201.142 or 201.143 or for

demonstrating attainment or reasonable further progress in the nonattainment area which the particular change will impact.

- d) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a shakedown period not to exceed 180 days.

(Source: Amended at 12 Ill. Reg. 6118, effective March 28, 1988)

Section 203.209 Significant Emissions Determination

A net emission increase in the pollutant emitted is significant if the rate of emission is equal to or in excess of the following:

- a) Carbon monoxide: 100 tons per year (tpy)
- b) Nitrogen oxides: 40 tpy
- c) Sulfur dioxide: 40 tpy
- d) Particulate matter: 25 tpy
- e) Ozone: 40 tpy of volatile organic compounds
- f) Lead: 0.6 tpy

(Source: Amended at 12 Ill. Reg. 6118, effective March 28, 1988)

Section 203.210 Relaxation of a Source-Specific Limitation

- a) No person shall cause or allow the operation of a source so as to exceed any enforceable limitation which affects or defines the applicability of the requirements of this Part to a stationary source or modification by specifying the permissible emission rate, operating hours, the type or amount of material processed, stored or combusted, or other aspects of source operation.
- b) At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in, or expiration of, any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours or operation, then the requirements of this Part shall apply as though construction had not yet commenced on the source or modification.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.211 Permit Exemption Based on Fugitive Emissions

The provisions of this Part shall not apply to a source or modification that would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable as evidenced by 35 Ill. Adm. Code 201.122, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the categories enumerated in Section 203.206(d).

(Source: Added at 12 Ill. Reg. 6118, effective March 22, 1988)

SUBPART C: REQUIREMENTS FOR MAJOR STATIONARY SOURCES IN NONATTAINMENT AREAS

Section 203.301 Lowest Achievable Emission Rate

- a) For any source, lowest achievable emission rate (LAER) will be the more stringent rate of emissions based on the following:

1) The most stringent emission limitation which is contained in the implementation plan of any state for such class or category of stationary source, unless it is demonstrated that such limitation is not achievable; or

2) The most stringent emission limitation which is achieved in practice by such a class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source performance standard adopted by USEPA pursuant to Section 111 of the Clean Air Act and made applicable in Illinois pursuant to Section 9.1 of the Act.

- b) The owner or operator of a new major stationary source shall demonstrate that the control equipment and process measures applied to the source will produce LAER.

c) The owner or operator of a major modification shall demonstrate that the control equipment and process measures applied to the major modification will produce LAER. This requirement applies to each emissions unit at which a net increase in emissions of the pollutant has occurred or would occur as a result of a physical change or change in the method of operation.

d) The owner or operator shall provide a detailed showing that the proposed emission limitations constitute LAER. Such demonstration shall include:

- 1) A description of the manner in which the proposed emission limitation was selected, including a detailed listing of information resources.
- 2) Alternative emission limitations, and
- 3) Such other reasonable information as the Agency may request as necessary to determine whether the proposed emission limitation is LAER.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.302 Maintenance of Reasonable Further Progress and Emission Offsets

- a) The owner or operator of a new major source or major modification shall provide emission offsets equal to or greater than the allowable emissions from the source or the net increase in emissions from the modification sufficient to allow the Agency to determine that the source or modification will not interfere with reasonable further progress as set forth in Section 173 of the Clean Air Act.
- b) The Agency shall allow the use of all or some portion of the available growth margin to satisfy subsection (a) if the owner or operator can evidence that the possible sources of emission offsets were investigated and none were available at that time.

(Source: Amended at 12 Ill. Reg. 6118, effective March 28, 1988)

Section 203.303 Baseline and Emission Offsets Determination

- a) An emission offset must be obtained from a source in operation prior to the permit application for the new or modified source. Emission offsets must be effective prior to start-up of the new or modified source.
- b) The emission offsets provided:
 - 1) Must be of the same pollutant and further be of a type with approximately the same qualitative significance for public health and welfare as that attributed to the increase from a particular change;
 - 2) Must, in the case of a shutdown, have occurred since April 24, 1979 or the date the area is designated by the USEPA as a nonattainment area for the pollutant, whichever is more recent, and the shutdown source is being replaced by a similar new source; and must, in the case of a fuel combustion source, be based on the type of fuel being burned at the time

the permit application is filed, and, if offset is to be produced by a future switch to a cleaner fuel, be accompanied by evidence that long-term supplies of the clean fuel are available and a commitment to a specified alternative control measure which would achieve the same degree of emission reduction if return of the dirtier fuel is proposed;

- 3) Must, in the case of a shutdown of a source or permanent curtailment of production or operating hours occurring on or after the date a permit application is filed for a new or modified source, have been made known to the affected work force;
- 4) Must, in the case of a past shutdown of a source or permanent curtailment of production or operating hours, have occurred since April 24, 1979, or the date the area is designated a nonattainment area for the pollutant, whichever is more recent, and the proposed new or modified source must be a replacement for the shutdown or curtailment;
- 5) Must be enforceable by permit;
- 6) Must not have been previously relied on, as demonstrated by the Agency, in issuing any permit pursuant to 35 Ill. Adm. Code 201.142 or 201.143 or this Part, or for demonstrating attainment or reasonable further progress.

c) The baselines for determining emission offsets are as follows:

- 1) Except as provided in subsection (2), the baseline for determining the extent to which emission reductions are creditable as offsets shall be the actual emissions of the source from which the offset is to be obtained, to the extent they are within any applicable emissions limitations of this Chapter or the Act or any applicable standards adopted by USEPA pursuant to Section 111 and 112 of the Clean Air Act, and made applicable in Illinois pursuant to Section 9.1 of the Environmental Protection Act.
- 2) If the demonstration of reasonable further progress and attainment of ambient air quality standards approved by USEPA pursuant to Section 110(a)(2) or 110(a)(3) of the Clean Air Act is based on the applicable emission limitations of this Chapter or the Act or any applicable standards adopted by USEPA pursuant to Section 111 and 112 of the Clean Air Act and made applicable in Illinois pursuant to Section 9.1 of the Environmental Protection Act for sources within an area, and the source from which the offset is to be obtained is subject to such limitations, the baseline for offsets shall be the lesser of such limitation or the potential to emit of the source.

d) The location of sources providing the emission offsets:

1) Must, for particulate matter, sulfur dioxide and carbon monoxide, be such that, relative to the site of the proposed new or modified source, the location of the offset, together with its effective stack height, ensures a positive net air quality benefit. This shall be demonstrated by atmospheric simulation modeling, unless the sources providing the offset are on the same premises or in the immediate vicinity of the new or modified source and the pollutants disperse from substantially the same effective stack height. In determining effective stack height, credit shall not be given for dispersion enhancement techniques. The owner or operator of a proposed new or modified source shall perform the analysis to demonstrate the acceptability of the location of an offset. If the Agency declines to make such analysis, Effective stack height means actual stack height plus plume rise. Where actual stack height exceeds good engineering practices, as determined pursuant to 40 CFR 51.100 (1987) (no future amendments or editions are included), the creditable stack height shall be used.

2) Must, for nitrogen oxides, be in the general vicinity of the proposed new or modified source.

3) Must, for volatile organic compounds, be in the broad vicinity of the proposed new or modified source; that is, offsets must be obtained from within the Air Quality Control Region of the new or modified source, or from other areas which may be contributing to the ozone problem at the site of the new or modified source.

e) Replacement of one volatile organic compound with another of lesser reactivity does not constitute an emission reduction.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.304 Exemptions from Emissions Offset Requirement (Repealed)

(Source: Repealed at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.305 Compliance by Existing Sources

The owner or operator shall demonstrate that all major stationary sources which he or she owns or operates (or which are owned or operated by an entity controlling or controlled by, or under common control, with the owner or operator) in Illinois are in compliance, or on a schedule for compliance, with all applicable state and

federal air pollution control requirements. For purposes of this Section, a schedule for compliance must be federally enforceable or contained in an order of the Illinois Pollution Control Board or a court decree.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.306 Analysis of Alternatives

For emission of volatile organic compounds or carbon monoxide, the owner or operator shall demonstrate that benefits of the new major source or major modification significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification, based upon an analysis of alternative sites, sizes, production processes and environmental control techniques for such proposed source.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

SUBPART F OPERATION OF A MAJOR STATIONARY SOURCE OR MAJOR MODIFICATION

Section 203.601 Lowest Achievable Emission Rate Compliance Requirement

No person shall cause or allow the operation of a new major stationary source or major modification subject to the requirements of Subpart C, except as in compliance with applicable LAER provisions established pursuant to Section 203.301 for such source or modification.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.602 Emission Offset Maintenance Requirement

No person shall cause or allow the operation of a new major stationary source or major modification where the owner or operator has demonstrated that it would not interfere with reasonable further progress by providing emission offsets pursuant to Section 203.302 without maintaining those emission offsets or other equivalent offsets.

(Source: Amended at 12 Ill. Reg. 6118, effective March 22, 1988)

Section 203.603 Ambient Monitoring Requirement (Repealed)

(Source: Repealed at 12 Ill. Reg. 6118, effective March 22, 1988)

**SUBPART G: - GENERAL MAINTENANCE OF
EMISSION OFFSETS**

**Section 203.701 - General Maintenance of
Emission Offsets**

No person shall cease to maintain emission offsets which were provided for a source or modification which is subject to this Part.

(Source: Added at 12 Ill. Reg. 6118, effective March 22, 1988)

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

CHAPTER 1: POLLUTION CONTROL BOARD

**SUBCHAPTER C: EMISSION STANDARDS AND
LIMITATIONS FOR STATIONARY SOURCES**

PART 211

DEFINITIONS AND GENERAL PROVISIONS

SUBPART A: GENERAL PROVISIONS

Section
211.101 Incorporations by Reference
211.102 Abbreviations and Units

SUBPART B: DEFINITIONS

Section
211.121 Other Definitions
211.122 Definitions

Appendix A: Rule into Section Table
Appendix B: Section into Rule Table

AUTHORITY: Implementing Sections 9 and 10
authorized by Section 27 of the Environmental
Protection Act (III, Rev. Stat. 1981, ch. 111
1/2, pars. 1010 and 1027).

SOURCE: Adopted as Chapter 2: Air Pollution,
Rule 201: Definitions, R71-23, 4 PCB 191, filed
and effective April 14, 1972; amended in R74-2
and R75-5, 32 PCB 295, at 3 III. Reg. 5, p. 777,
effective February 3, 1979; amended in R78-3 and
4, 35 PCB 75 and 243, at 3 III. Reg. 30, p. 124,
effective July 28, 1979; amended in R80-5, at 7
III. Reg. 1244, effective January 21, 1983;
codified at 7 III. Reg. 13590, amended in R82-1
(Docket A) at 10 III. Reg. 12624, effective July
7, 1986; amended in R85-21(A) at 11 III. Reg.
11747, effective June 29, 1987; amended in
R86-34 at 11 III. Reg. 12267, effective July 10,
1987; amended in R86-39 at 11 III. Reg. 20804,
effective December 14, 1987; amended in R82-14
and R86-37 at 12 III. Reg. 787, effective
December 24, 1987; amended in R86-18 at 12 III.
Reg. 7284, effective April 8, 1988; amended in
R86-10 at 12 III. Reg. 7621, effective April 11,
1988.

SUBPART A: GENERAL PROVISIONS

Section 211.101 Incorporations by Reference

The following materials are incorporated by
reference:

- a) "Evaporation Loss from Floating Roof Tanks,"
American Petroleum Institute Bulletin 2517,
1962
- b) Ringelmann Chart, Information Circular 833
(Revision of IC7718), Bureau of Mines, U.S.
Department of Interior, May 1, 1967

c) Standard Industrial Classification Manual,
Superintendent of Documents, Washington, D.C.
20402, 1972

d) American Society for Testing and Materials,
1916 Race Street, Philadelphia, PA 19103

A.S.T.M. D-86
A.S.T.M. D-240-64
A.S.T.M. D-323
A.S.T.M. D-369-69 (1971)
A.S.T.M. D-396-69
A.S.T.M. D-900-55
A.S.T.M. D-975-68
A.S.T.M. D-1826-64
A.S.T.M. D-2015-66
A.S.T.M. D-2880-71

(Source: Added and codified at 7 III. Reg.
13590)

Section 211.102 Abbreviations and Units

a) Abbreviations used in this Part include the
following:

btu	British thermal units (60°F)
°C	degrees Celsius or Centigrade
°F	degrees Fahrenheit
g	grams
in	inch
°K	degrees Kelvin
kg	kilograms
kPa	Kilopascals
mmHg	millimeters of mercury
ppm (vol)	parts per million by volume
psi	pounds per square inch
psia	pounds per square inch absolute

b) The following conversion factors have been
used in this Part:

English	Metric
1 psia	6.897 kPa (51.71 mmHg)
2.205 lbs	1 kg
32°F	0°C (273.15°K)

(Source: Added and codified at 7 III. Reg.
13590)

SUBPART B: DEFINITIONS

Section 211.121 Other Definitions

All terms defined in 35 III. Adm. Code 201 which
appear in 35 III. Adm. Code 211-217 have the
definitions specified by 35 III. Adm. Code
201.102. Otherwise, the definitions specified
in Section 211.122 apply.

(Source: Amended at 10 III. Reg. 12624)

Section 211.122 Definitions

"Accumulator": the reservoir of a condensing unit receiving the condensate from a surface condenser.

"Acid Gases": for the purposes of Ill. Rev. Stat. 1985, ch. 111 1/2, par. 1009.4, hydrogen chloride, hydrogen fluoride and hydrogen bromide, which exist as gases, liquid mist, or any combination thereof.

"Actual Heat Input": the quantity of heat produced by the combustion of fuel using the gross heating value of the fuel.

"Aeration": the practice of forcing air through bulk stored grain to maintain the condition of the grain.

"Afterburner": a device in which materials in gaseous effluents are combusted.

"Air Dried Coating": coatings that dry by the use of air or forced air at temperatures up to 363.15°K (194°F).

"Annual Grain Through-Put": unless otherwise shown by the owner or operator, annual grain through-put for grain-handling operations, which have been in operation for three consecutive years prior to June 30, 1975, shall be determined by adding grain receipts and shipments for the three previous fiscal years and dividing the total by 6. The annual grain through-put for grain-handling operations in operation for less than three consecutive years prior to June 30, 1975, shall be determined by a reasonable three-year estimate; the owner or operator shall document the reasonableness of his three-year estimate.

"Architectural Coating": any coating used for residential or commercial buildings or their appurtenances, or for industrial buildings which is site applied.

"Asphalt": the dark-brown to black cementitious material (solid, semisolid, or liquid in consistency) of which the main constituents are bitumens which occur naturally or as a residue of petroleum refining.

"Asphalt Prime Coat": a low-viscosity liquid asphalt applied to an absorbent surface as the first of more than one asphalt coat.

"Automobile": any first division motor vehicle as that term is defined in the Illinois Vehicle Code (Ill. Rev. Stat. 1981, ch. 95 1/2, pars. 1-100 et seq.).

"Automobile or Light-Duty Truck Manufacturing Plant": a facility where parts are manufactured or finished for eventual inclusion into a finished automobile or light-duty truck ready for sale to vehicle dealers, but not including customizers, body shops and other repainters.

"Batch Loading": the process of loading a number of individual parts at the same time for degreasing.

"Bead-Dipping": the dipping of an assembled tire bead into a solvent-based cement.

"British Thermal Unit": the quantity of heat required to raise one pound of water from 60°F to 61°F (abbreviated btu).

"Bulk Gasoline Plant": any gasoline storage and distribution facility that receives gasoline from bulk gasoline terminals by delivery vessels and distributes gasoline to gasoline dispensing facilities.

"Bulk Gasoline Terminal": any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, and distributes gasoline to bulk gasoline plants or gasoline dispensing facilities.

"Can Coating": the application of a coating material to a single walled container that is manufactured from metal sheets thinner than 29 gauge (0.0141 in).

"Certified Investigation": a report signed by Illinois Environmental Protection Agency (Agency) personnel certifying whether a grain-handling operation (or portion thereof) or grain-drying operation is causing or tending to cause air pollution. Such report must describe the signatory's investigation, including a summary of those facts on which he relies to certify whether the grain-handling or grain-drying operation is causing or threatening or allowing the discharge or emission of any contaminant into the environment so as to cause or tend to cause air pollution in Illinois, either alone or in combination with contaminants from other sources, or so as to violate regulations or standards adopted by the Pollution Control Board (Board) under the Environmental Protection Act (Act). The certified investigation shall be open to reasonable public inspection and may be copied upon payment of the actual cost of reproducing the original.

"Choke Loading": that method of transferring grain from the grain-handling operation to any vehicle for shipment or delivery which precludes a free fall velocity of grain from a discharge spout into the receiving container.

"Cleaning and Separating Operation": that operation where foreign and undesired substances are removed from the grain.

"Clear Coating": coatings that lack color and opacity or are transparent using the undercoat as a reflectant base or undertone color.

"Coal Refuse": waste products of coal mining, cleaning and coal preparation operations containing coal, matrix material, clay and other organic and inorganic material.

"Coating Applicator": equipment used to apply a surface coating.

"Coating Line": an operation where a surface coating is applied to a material and subsequently the coating is dried and/or cured.

"Coating Plant": any building, structure or installation that contains a coating line and which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person (or by persons under common control).

"Coil Coating": the application of a coating material to any flat metal sheet or strip that comes in rolls or coils.

"Cold Cleaning": the process of cleaning and removing soils from surfaces by spraying, brushing, flushing or immersion while maintaining the organic solvent below its boiling point. Wipe cleaning is not included in this definition.

"Complete Combustion": a process in which all carbon contained in a fuel or gas stream is converted to carbon dioxide.

"Component": any piece of equipment which has the potential to leak volatile organic material including, but not limited to, pump seals, compressor seals, seal oil degassing vents, pipeline valves, pressure relief devices, process drains and open ended pipes. This definition excludes valves which are not externally regulated, flanges and equipment in heavy liquid service. For purposes of Subpart Q (35 Ill. Adm. Code 215), this definition also excludes bleed ports of gear pumps in polymer service.

"Concentrated Nitric Acid Manufacturing Process": any acid producing facility manufacturing nitric acid with a concentration equal to or greater than 70 percent by weight.

"Condensate": hydrocarbon liquid separated from its associated gases which condenses due to changes in the temperature or pressure and remains liquid at standard conditions.

"Conveyorized Degreasing": the continuous process of cleaning and removing soils from surfaces utilizing either cold or vaporized solvents.

"Crude Oil": a naturally occurring mixture which consists of hydrocarbons and sulfur, nitrogen or oxygen derivatives of hydrocarbons and which is a liquid at standard conditions.

"Crude Oil Gathering": the transportation of crude oil or condensate after custody transfer between a production facility and a reception point.

"Custody Transfer": the transfer of produced petroleum and/or condensate after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

"Cutback Asphalt": any asphalt which has been liquified by blending with petroleum solvents other than residual fuel oil and has not been emulsified with water.

"Degreaser": any equipment or system used in solvent cleaning.

"Delivery Vessel": any tank truck or trailer equipped with a storage tank that is used in the transport of gasoline to a stationary storage tank at a gasoline dispensing facility, bulk gasoline plant or bulk gasoline terminal.

"Distillate Fuel Oil": fuel oils of grade No. 1 or 2 as specified in detailed requirements for fuel oil A.S.T.M. D-369-69 (1971).

"Dry Cleaning Facility": a facility engaged in the cleaning of fabrics using an essentially nonaqueous solvent by means of one or more solvent washes, extraction of excess solvent by spinning and drying by tumbling in an airstream. The facility includes, but is not limited to, washers, dryers, filter and purification systems, waste disposal systems, holding tanks, pumps and attendant piping and valves.

"Dump-Pit Area": any area where grain is received at a grain-handling or grain-drying operation.

"Effective Grate Area": that area of a dump-pit grate through which air passes, or would pass, when aspirated.

"Effluent Water Separator": any tank, box, sump or other apparatus in which any organic material floating on or entrained or contained in water entering such tank, box, sump or other apparatus is physically separated and removed from such water prior to outfall, drainage or recovery of such water.

"Emission Rate": total quantity of any air contaminant discharge into the atmosphere in any one-hour period.

"End Sealing Compound Coat": a compound applied to can ends which functions as a gasket when the end is assembled on the can.

"Excess Air": air supplied in addition to the theoretical quantity necessary for complete combustion of all fuel and/or combustible waste material.

"Excessive Release": a discharge of more than 295 g (0.65 pounds) of mercaptans and/or hydrogen sulfide into the atmosphere in any five minute period.

"Existing Grain-Drying Operation": any grain-drying operation the construction or modification of which was commenced prior to June 30, 1975.

"Existing Grain-Handling Operation": any grain-handling operation the construction or modification of which was commenced prior to June 30, 1975.

"Exterior Base Coat": an initial coating applied to the exterior of a can after the can body has been formed.

"Exterior End Coat": a coating applied by rollers or spraying to the exterior end of a can.

"External Floating Roof": a storage vessel cover in an open top tank consisting of a double deck or pontoon single deck which is supported by the petroleum liquid being contained and is equipped with a closure seal between the deck edge and tank wall.

"Extreme Performance Coating": coatings designed for exposure to any of the following: the ambient weather conditions, temperatures above 368.15°K (203°F), detergents, abrasive and scouring agents, solvents, corrosive atmospheres, or other similar extreme environmental conditions.

"Fabric Coating": the coating of a textile substrate.

"Final Repair Coat": the repainting of any coating which is damaged during vehicle assembly.

"Firebox": the chamber or compartment of a boiler or furnace in which materials are burned, but not the combustion chamber or afterburner of an incinerator.

"Flexographic Printing": the application of words, designs and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of elastomeric materials.

"Floating Roof": a roof on a stationary tank, reservoir or other container which moves vertically upon change in volume of the stored material.

"Freeboard Height": for open top vapor degreasers, the distance from the top of the vapor zone to the top of the degreaser tank. For cold cleaning degreasers, the distance from the solvent to the top of the degreaser tank.

"Fuel Combustion Emission Source": any furnace, boiler or similar equipment used for the primary purpose of producing heat or power by indirect heat transfer.

"Fuel Gas System": a system for collection of refinery fuel gas including, but not limited to, piping for collecting tail gas from various process units, mixing drums and controls and distribution piping.

"Fugitive Particulate Matter": any particulate matter emitted into the atmosphere other than through a stack, provided that nothing in this definition or in 35 III. Adm. Code 212, Subpart K shall exempt any source from compliance with other provisions of 35 III. Adm. Code 212 otherwise applicable merely because of the absence of a stack.

"Gas Service": means that the component contains process fluid that is in the gaseous state at operating conditions.

"Gasoline": any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.

"Gasoline Dispensing Facility": any site where gasoline is transferred from a stationary storage tank to a motor vehicle gasoline tank used to provide fuel to the engine of that motor vehicle.

"Grain": the whole kernel or seed of corn, wheat, oats, soybeans and any other cereal or oil seed plant; and the normal fines, dust and foreign matter which results from harvesting, handling or conditioning. The grain shall be unaltered by grinding or processing.

"Grain-Drying Operation": any operation, excluding aeration, by which moisture is removed from grain and which typically uses forced ventilation with the addition of heat.

"Grain-Handling and Conditioning Operation": a grain storage facility and its associated grain transfer, cleaning, drying, grinding and mixing operations.

"Grain-Handling Operation": any operation where one or more of the following grain-related processes (other than grain-drying operation, portable grain-handling equipment, one-turn storage space, and excluding flour mills and feed mills) are performed: receiving, shipping, transferring, storing, mixing or treating of grain or other processes pursuant to normal grain operations.

"Green Tire Spraying": the spraying of green tires, both inside and outside, with release compounds which help remove air from the tire during molding and prevent the tire from sticking to the mold after curing.

"Green Tires": assembled tires before molding and curing have occurred.

"Gross Heating Value": amount of heat produced when a unit quantity of fuel is burned to carbon dioxide and water vapor, and the water vapor condensed as described in ASTM D-2015-66, D-900-55, D-1826-64 and D-240-64.

"Heavy Liquid": liquid with a true vapor pressure of less than 0.3 kPa (0.04 psi) at 294.2°K (70°F) or 0.1 Reid Vapor Pressure as determined by ASTM method D-323; or which when distilled requires a temperature of 300°F or greater to recover 10% of the liquid as determined by ASTM method D-86.

"Heavy Metals": for the purposes of Ill. Rev. Stat. 1985, ch. 111 1/2, par. 1009.4, elemental, ionic, or combined forms of arsenic, cadmium, mercury, chromium, nickel and lead.

"Heavy, Off-Highway Vehicle Products": for the purposes of Section 215.204(k), heavy off-highway vehicle products shall include: heavy construction, mining, farming or material handling equipment; heavy industrial engines; diesel-electric locomotives and associated power generation equipment; and the components of such equipment or engines.

"Hot Well": the reservoir of a condensing unit receiving the condensate from a barometric condenser.

"Housekeeping Practices": those activities specifically defined in the list of housekeeping practices developed by the Joint EPA - Industry Task Force and included herein under 35 III. Adm. Code 212.461.

"Incinerator": combustion apparatus in which refuse is burned.

"Indirect Heat Transfer": transfer of heat in such a way that the source of heat does not come into direct contact with process materials.

"In-Process Tank": a container used for mixing, blending, heating, reacting, holding, crystallizing, evaporating, or cleaning operations in the manufacture of pharmaceuticals.

"Interior Body Spray Coat": a coating applied by spray to the interior of a can after the can body has been formed.

"Internal Transferring Area": areas and associated equipment used for conveying grain among the various grain operations.

"Large Appliance Coating": the application of a coating material to the component metal parts (including but not limited to doors, cases, lids, panels and interior support parts) of residential and commercial washers, dryers, ranges, refrigerators, freezers, water heaters, dishwashers, trash compactors, air conditioners and other similar products.

"Light-Duty Truck": any second division motor vehicle, as that term is defined in the Illinois Vehicle Code, (Ill. Rev. Stat. 1981, ch. 95 1/2, pars 1-100 et seq.) weighing less than 3854 kilograms (8500 pounds) gross.

"Liquid-Mounted Seal": a primary seal mounted in continuous contact with the liquid between the tank wall and the floating roof edge around the circumference of the roof.

"Liquid Service": means that the equipment or component contains process fluid that is in a liquid state at operating conditions.

"Load-Out Area": any area where grain is transferred from the grain-handling operation to any vehicle for shipment or delivery.

"Low Solvent Coating": a coating which contains less organic solvent than the conventional coatings used by the industry. Low solvent coatings include water-borne, higher solids, electro-deposition and powder coatings.

"Magnet Wire Coating": the application of a coating of electrically insulating varnish or enamel to conducting wire to be used in electrical machinery.

"Major Dump Pit": any dump pit with an annual grain through-put of more than 300,000 bushels, or which receives more than 40% of the annual grain through-put of the grain-handling operation.

"Major Metropolitan Area (MPA)": any county or group of counties which is defined by the following table:

MAJOR METROPOLITAN AREAS IN ILLINOIS (MPA's)

MPA	COUNTIES INCLUDED IN MPA
Champaign-Urbana	Champaign
Chicago	Cook, Lake, Will.
	DuPage, McHenry, Kane,
	Grundy, Kendall, Kankakee
Decatur	Macon
Peoria	Peoria, Tazewell
Rockford	Winnebago
Rock Island-Moline	Rock Island
Springfield	Sangamon
St. Louis (Illinois)	St. Clair, Madison
Bloomington-Normal	McLean

"Major Population Area (MPA)": areas of major population concentration in Illinois, as described below:

The area within the counties of Cook, Lake; DuPage; Will; the townships of Burton, Richmond, McHenry, Greenwood, Munda, Door, Algonquin, Grafton and the municipality of Woodstock, plus a zone extending two miles beyond the boundary of said municipality located in McHenry County; the townships of Quince, Rutland, Elgin, Plato, St. Charles, Campton, Geneva, Blackberry, Batavia, Sugar Creek and Aurora located in Kane County; and the municipalities of Kankakee, Bradley and Bourbonnais, plus a zone extending two miles beyond the boundaries of said municipalities in Kankakee County.

The area within the municipalities of Rockford and Loves Park, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the municipalities of Rock Island, Moline, East Moline, Carbon Cliff, Milledgeville, Oak Grove, St. Louis, Hampton, Greenwood and Coal Valley, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the municipalities of Galesburg and East Galesburg, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the municipalities of Bartonville, Peoria and Peoria Heights, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the municipalities of Pekin, North Pekin, Marquette Heights, Creve Coeur and East Peoria, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the municipalities of Bloomington and Normal, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the municipalities of Champaign, Urbana and Savoy, plus a zone extending two

miles beyond the boundaries of said municipalities.

The area within the municipalities of Decatur, Mt. Zion, Harristown and Forsyth, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the municipalities of Springfield, Leland Grove, Jerome, Southern View, Grandview, Sherman and Chatham, plus a zone extending two miles beyond the boundaries of said municipalities.

The area within the townships of Godfrey, Foster, Wood River, Fort Russell, Chouteau, Edwardsville, Venice, Mameoki, Alton, Granite City and Collinsville located in Madison County; and the townships of Stites, Canteen, Centreville, Caseyville, St. Clair, Sugar Loaf and Stookey located in St. Clair County.

"Manufacturing Process": a process emission source or series of process emission sources used to convert raw materials, feed stocks, subassemblies or other components into a product, either for sale or for use as a component in a subsequent manufacturing process.

"Metal Furniture Coating": the application of a coating material to any furniture piece made of metal or any metal part which is or will be assembled with other metal, wood, fabric, plastic or glass parts to form a furniture piece including, but not limited to, tables, chairs, wastebaskets, beds, desks, lockers, benches, shelving, file cabinets, lamps and room dividers. This definition shall not apply to any coating line coating metal parts or products that is identified under the Standard Industrial Classification Code for Major Groups 33, 34, 35, 36, 37, 38, 39, 40, or 41.

"Miscellaneous Fabricated Product Manufacturing Process":

A manufacturing process involving one or more of the following applications, including any drying and curing of formulations, and capable of emitting volatile organic material:

Adhesives to fabricate or assemble non-furniture components or products

Asphalt solutions to paper or fiberboard

Asphalt to paper or felt

Coatings or dye to leather

Coatings to plastic

Coatings to rubber or glass

Curing of furniture adhesives in an oven which would emit in excess of 10 tons of volatile organic material per year if no air pollution control equipment were used

Disinfectant material to manufactured items

Plastic foam scrap or "fluff" from the manufacture of foam containers and packaging material to form resin pellets

Resin solutions to fiber substances

Rubber solutions to molds

Viscose solutions for food casings

The storage and handling of formulations associated with the process described above.

The use and handling of organic liquids and other substances for clean-up operations associated with the process described above.

"Miscellaneous Formulation Manufacturing Process":

A manufacturing process which compounds one or more of the following and is capable of emitting volatile organic material:

Adhesives

Asphalt solutions

Caulks, sealants or waterproofing agents

Coatings, other than paint and ink

Concrete curing compounds

Dyes

Friction materials and compounds

Resin solutions

Rubber solutions

Viscose solutions

The storage and handling of formulations associated with the process described above.

The use and handling of organic liquids and other substances for clean-up operations associated with the process described above.

"Miscellaneous Metal Parts and Products": For the purposes of 35 Ill. Adm. Code 215.204(j), miscellaneous metal parts and products shall include farm machinery, garden machinery, small appliances, commercial machinery, industrial machinery, fabricated metal products and any other industrial category which coats metal parts or products under the Standard Industrial Classification Code for Major Groups 33, 34, 35, 36, 37, 38, or 39 with the exception of the following: coating lines subject to 35 Ill. Adm. Code 215.204(a)-(i) and (k), automobile or light-duty truck refinishing, the exterior of marine vessels and the customized top coating of automobiles and trucks if production is less than thirty-five vehicles per day.

"Miscellaneous Organic Chemical Manufacturing Process":

A manufacturing process which produces by chemical reaction, one or more of the following organic compounds or mixtures of organic compounds and which is capable of emitting volatile organic materials:

Chemicals listed in 35 Ill. Adm. Code 215. Appendix B.

Chlorinated and sulfonated compounds

Cosmetic, detergent, soap or surfactant intermediaries or specialties and products

Disinfectants

Food additives

Oil and petroleum product additives

Plasticizers

Resins or polymers

Rubber additives

Sweeteners

Varnishes

The storage and handling of formulations associated with the process described above.

The use and handling of organic liquids and other substances for clean-up operations associated with the process described above.

"Mixing Operation": the operation of combining two or more ingredients, of which at least one is a grain.

"New Grain-Drying Operation": any grain-drying operation the construction or modification of which is commenced on or after June 30, 1975.

"New Grain-Handling Operation": any grain-handling operation the construction or modification of which is commenced on or after June 30, 1975.

"One Hundred Percent Acid": acid with a specific gravity of 1.8205 at 30°C in the case of sulfuric acid and 1.4952 at 30°C in the case of nitric acid.

"One-Turn Storage Space": that space used to store grain with a total annual through-put not in excess of the total bushel storage of that space.

"Opacity": a condition which renders material partially or wholly impervious to transmittance of light and causes obstruction of an observer's view. For the purposes of these regulations, the following equivalence between opacity and Ringelmann shall be employed:

Opacity Percent	Ringelmann
10	0.5
20	1.
30	1.5
40	2.

Opacity Percent

Ringelmann

60
80
100.

3.
4.
5.

"Open Top Vapor Degreasing": the batch process of cleaning and removing soils from surfaces by condensing hot solvent vapor on the colder metal parts.

"Operator of Gasoline Dispensing Facility": any person who is the lessee of or operates, controls or supervises a gasoline dispensing facility.

"Organic Material": any chemical compound of carbon including diluents and thinners which are liquids at standard conditions and which are used as solvents, viscosity reducers or cleaning agents, but excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbonic acid, metallic carbide, metallic carbonates and ammonium carbonate.

"Organic Materials": for the purposes of Ill. Rev. Stat. 1985, ch. 111 1/2, par. 1009.4, any chemical compound of carbon including diluents and thinners which are liquids at standard conditions and which are used as solvents, viscosity reducers, or cleaning agents, and polychlorinated dibenzo-p-dioxins, polychlorinated dibenzofurans and polynuclear aromatic hydrocarbons shall be considered to be organic materials. Methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbonic acid, metallic carbide, metallic carbonates and ammonium carbonate shall not be considered to be organic materials for the purposes of Ill. Rev. Stat. 1985, ch. 111 1/2, par. 1009.4.

"Organic Vapor": gaseous phase of an organic material or a mixture of organic materials present in the atmosphere.

"Overvarnish": a coating applied directly over ink or printing.

"Owner of Gasoline Dispensing Facility": any person who has legal or equitable title to a stationary storage tank at a gasoline dispensing facility.

"Packaging Rotogravure Printing": rotogravure printing upon paper, paper board, metal foil, plastic film and other substrates, which are, in subsequent operations, formed into packaging products or labels for articles to be sold.

"Paint Manufacturing Plant": a plant that mixes, blends, or compounds enamels, lacquers, sealers, shellacs, stains, varnishes or pigmented surface coatings.

"Paper Coating": the application of a coating material to paper or pressure sensitive tapes, regardless of substrate, including web coatings on plastic fibers and decorative coatings on metal foil.

"Particulate Matter": any solid or liquid material, other than water, which exists in finely divided form.

"Petroleum Liquid": crude oil, condensate or any finished or intermediate product manufactured at a petroleum refinery, but not including Numbers 2 through 6 fuel oils as specified in ASTM D-396-69, gas turbine fuel oils Numbers 2-GT through 4-GT as specified in ASTM D-2880-71 or diesel fuel oils Numbers 2-D and 4-D, as specified in ASTM D-975-68.

"Petroleum Refinery": any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation, cracking, extraction or reforming of unfinished petroleum derivatives.

"Pharmaceutical": any compound or mixture, other than food, used in the prevention, diagnosis, alleviation, treatment or cure of disease in man and animal.

"Photochemically Reactive Material": any organic material with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified below or the composition of which exceeds any of the following individual percentage composition limitations. Whenever any photochemically reactive material or any constituent of any organic material may be classified from its chemical structure into more than one of the following groups of organic materials it shall be considered as a member of the most reactive group, that is, the group having the least allowable percent of the total organic materials.

A combination of hydrocarbons, alcohols, aldehydes, esters, ethers or ketones having an olefinic or cyclo-olefinic types of unsaturation: 5 percent. This definition does not apply to perchloroethylene or trichloroethylene.

A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.

A combination of ethylbenzene, ketones having branched hydrocarbon structures or toluene: 20 percent.

"Pneumatic Rubber Tire Manufacture": the production of pneumatic rubber tires with a bead diameter up to but not including 20.0 inches and cross section dimension up to 12.8 inches, but not including specialty tires for antique or other vehicles when produced on equipment separate from normal production lines for passenger or truck type tires.

"Polybasic Organic Acid Partial Oxidation Manufacturing Process": any process involving partial oxidation of hydrocarbons with air to manufacture polybasic acids or their anhydrides, such as maleic anhydride, phthalic anhydride, terephthalic acid, isophthalic acid, trimellitic anhydride.

"Portable Grain-Handling Equipment": any equipment (excluding portable grain dryers) that is designed and maintained to be movable, primarily for use in a non-continuous operation for loading and unloading one-turn storage

space, and is not physically connected to the grain elevator, provided that the manufacturer's rated capacity of the equipment does not exceed 10,000 bushels per hour.

"Portland Cement Process": any facility manufacturing portland cement by either the wet or dry process.

"Power Driven Fastener Coating": the coating of nail, staple, brad and finish nail fasteners where such fasteners are fabricated from wire or rod of 0.0254 inch diameter or greater, where such fasteners are bonded into coils or strips, such coils and strips containing a number of such fasteners, which fasteners are manufactured for use in power tools, and which fasteners must conform with formal standards for specific uses established by various Federal and national organizations including Federal Specification FF-M-105b of the General Services Administration dated August 23, 1977 (does not include any later amendments or editions; U.S. Army Armament Research and Development Command, Attn: DRDAR-TST, Rock Island, IL 61201); Bulletin UM-25d of the U.S. Department of Housing and Urban Development - Federal Housing Administration dated September 5, 1973 (does not include any later amendments or editions; Department of HUD, 547 W. Jackson Blvd., Room 1005, Chicago, IL 60606), and the Model Building Code of the Council of American Building Officials, and similar standards. For the purposes of this definition, the terms "brad" and "finish nail" refer to single leg fasteners fabricated in the same manner as staples. The application of coatings to staple, brad, and finish nail fasteners may be associated with the incremental forming of such fasteners in a cyclic or repetitious manner (incremental fabrication) or with the forming of strips of such fasteners as a unit from a band of wires (unit fabrication).

"PPM (Vol.) - (Parts per Million) (Volume)": a volume/volume ratio which expresses the volumetric concentration of gaseous air contaminant in a million unit volumes of gas.

"Pressure Tank": a tank in which fluids are stored at a pressure greater than atmospheric pressure.

"Prime Coat": the first film of coating material applied in a multiple coat operation.

"Prime Surfacer Coat": a film of coating material that touches up areas on the surface not adequately covered by the prime coat before application of the top coat.

"Process": any stationary emission source other than a fuel combustion emission source or an incinerator.

"Process Weight Rate": the actual weight or engineering approximation thereof of all materials except liquid and gaseous fuels and combustion air, introduced into any process per hour. For a cyclical or batch operation, the process weight rate shall be determined by dividing such actual weight or engineering approximation thereof by the number of hours of

operation excluding any time during which the equipment is idle. For continuous processes, the process weight rate shall be determined by dividing such actual weight or engineering approximation thereof by the number of hours in one complete operation, excluding any time during which the equipment is idle.

"Production Equipment Exhaust System": a system for collecting and directing into the atmosphere emissions of volatile organic material from reactors, centrifuges and other process emission sources.

"Publication Rotogravure Printing": rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements or other types of non-packaging printed materials.

"Reactor": a vat, vessel or other device in which chemical reactions take place.

"Reasonably Available Control Technology (RACT)": the lowest emission limitation that an emission source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility.

"Refinery Fuel Gas": any gas which is generated by a petroleum refinery process unit and which is combusted at the refinery, including any gaseous mixture of natural gas and fuel gas.

"Refinery Unit, Process Unit or Unit": a set of components which are a part of a basic process operation such as distillation, hydrotreating, cracking or reforming of hydrocarbons.

"Residual Fuel Oil": fuel oils of grade numbers 4, 5 and 6 as specified in detailed requirements for fuel oils A.S.T.M. D-396-69 (1971).

"Restricted Area": the area within the boundaries of any "municipality" as defined in the Illinois Municipal Code, plus a zone extending one mile beyond the boundaries of any such municipality having a population of 1000 or more according to the latest federal census.

"Ringelmann Chart": the chart published and described in the Bureau of Mines, U.S. Department of Interior, Information Circular 8333 (Revision of IC7718) May 1, 1967, or any adaptation thereof which has been approved by the Agency.

"Roadway": any street, highway, road, alley, sidewalk, parking lot, airport, rail bed or terminal, bikeway, pedestrian mall or other structure used for transportation purposes.

"Roll Printing": the application of words, designs and pictures to a substrate usually by means of a series of hard rubber or metal rolls each with only partial coverage.

"Rotogravure Printing": the application of words, designs and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is recessed relative to the non-image area.

"Safety Relief Valve": a valve which is normally closed and which is designed to open in order to relieve excessive pressures within a vessel or pipe.

"Sandblasting": the use of a mixture of sand and air at high pressures for cleaning and/or polishing any type of surface.

"Set of Safety Relief Valves": one or more safety relief valves designed to open in order to relieve excessive pressures in the same vessel or pipe.

"Sheet Basecoat": a coating applied to metal when the metal is in sheet form to serve as either the exterior or interior of a can for either two-piece or three-piece cans.

"Shotblasting": the use of a mixture of any metallic or non-metallic substance and air at high pressures for cleaning and/or polishing any type of surface.

"Side-Seam Spray Coat": a coating applied to the seam of a three-piece can.

"Smoke": small gas-borne particles resulting from incomplete combustion, consisting predominantly but not exclusively of carbon, ash and other combustible material, that form a visible plume in the air.

"Smokeless Flame": a combustion unit and the stack to which it is affixed in which organic material achieves combustion by burning in the atmosphere such that the smoke or other particulate matter emitted to the atmosphere from such combustion does not have an appearance, density or shade darker than No. 1 of the Ringelmann Chart.

"Solvent Cleaning": the process of cleaning soils from surfaces by cold cleaning, open top vapor degreasing or conveyorized degreasing.

"Specialty High Gloss Catalyzed Coating": commercial contract finishing of material prepared for printers and lithographers where the finishing process uses a solvent-borne coating, formulated with a catalyst, in a quantity of no more than 12,000 gallons/year as supplied, where the coating machines are sheet fed and the coated sheets are brought to a minimum surface temperature of 190°F., and where the coated sheets are to achieve the minimum specular reflectance index of .65 measured at a 60 degree angle with a gloss meter.

"Splash Loading": a method of loading a tank, railroad tank car, tank truck or trailer by use of other than a submerged loading pipe.

"Stack": a flue or conduit, free-standing or with exhaust port above the roof of the building on which it is mounted, by which air contaminants are emitted into the atmosphere.

"Standard Conditions": a temperature of 70°F and a pressure of 14.7 pounds per square inch absolute (psia).

"Standard Cubic Foot (scf)": the volume of one cubic foot of gas at standard conditions.

"Startup": the setting in operation of an emission source for any purpose.

"Stationary Emission Source": an emission source which is not self-propelled.

"Stationary Storage Tank": any container of liquid or gas which is designed and constructed to remain at one site.

"Submerged Loading Pipe": any loading pipe the discharge opening of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank. When applied to a tank which is loaded from the side, any loading pipe the discharge of which is entirely submerged when the liquid level is 18 inches or two times the loading pipe diameter, whichever is greater, above the bottom of the tank. The definition shall also apply to any loading pipe which is continuously submerged during loading operations.

"Sulfuric Acid Mist": sulfuric acid mist as measured according to the method specified in 35 Ill. Adm. Code 214.101(b).

"Surface Condenser": a device which removes a substance from a gas stream by reducing the temperature of the stream, without direct contact between the coolant and the stream.

"Top Coat": a film of coating material applied in a multiple coat operation other than the prime coat, final repair coat or prime surfacer coat.

"Transfer Efficiency": the weight or volume of coating adhering to the material being coated divided by the weight or volume of coating delivered to the coating applicator and multiplied by 100 to equal a percentage.

"Tread End Cementing": the application of a solvent-based cement to the tire tread ends.

"True Vapor Pressure": the equilibrium partial pressure exerted by a petroleum liquid as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, "Evaporation Loss From Floating Roof Tanks" (1962).

"Turnaround": the procedure of shutting down an operating refinery unit, emptying gaseous and liquid contents to do inspection, maintenance and repair work, and putting the unit back into production.

"Undertread Cementing": the application of a solvent-based cement to the underside of a tire tread.

"Unregulated Safety Relief Valve": a safety relief valve which cannot be actuated by a means other than high pressure in the pipe or vessel which it protects.

"Vacuum Producing System": any reciprocating, rotary or centrifugal blower or compressor, or

any jet ejector or device that creates suction from a pressure below atmospheric and discharges against a greater pressure.

"Valves Not Externally Regulated": valves that have no external controls, such as in-line check valves.

"Vapor Balance System": any combination of pipes or hoses which creates a closed system between the vapor spaces of an unloading tank and a receiving tank such that vapors displaced from the receiving tank are transferred to the tank being unloaded.

"Vapor Collection System": all piping, seals, hoses, connections, pressure-vacuum vents, and other possible sources between the gasoline delivery vessel and the vapor processing unit and/or the storage tanks and vapor holder.

"Vapor Control System": any system that prevents release to the atmosphere of organic material in the vapors displaced from a tank during the transfer of gasoline.

"Vapor-Mounted Primary Seal": a primary seal mounted with an air space bounded by the bottom of the primary seal, the tank wall, the liquid surface and the floating roof.

"Vinyl Coating": the application of a topcoat or printing to vinyl coated fabric or vinyl sheets.

"Volatile Organic Liquid": any liquid which contains volatile organic material.

"Volatile Organic Material": any organic material which participates in atmospheric photochemical reactions unless specifically exempted from this definition. Volatile organic material emissions shall be measured by the reference methods specified under 40 CFR 60, Appendix A (1986) (no future amendments or editions are included), or, if no reference method is applicable, may be determined by mass balance calculations. For purposes of this definition, the following are not volatile organic materials:

Chlorodifluoromethane
Chloropentafluoroethane
Dichlorodifluoromethane
Dichlorotetrafluoroethane
Methane
Ethane
1,1,1-Trichloroethane
Methylene chloride
Trichlorofluoromethane
Trichlorotrifluoroethane
Trifluoromethane

"Volatile Petroleum Liquid": any petroleum liquid with a true vapor pressure that is greater than 1.5 psia (78 millimeters of mercury) at standard conditions.

"Wastewater (Oil/Water) Separator": any device or piece of equipment which utilizes the difference in density between oil and water to remove oil and associated chemicals of water, or

any device, such as a flocculation tank or a clarifier, which removes petroleum derived compounds from waste water.

"Weak Nitric Acid Manufacturing Process": any acid producing facility manufacturing nitric acid with a concentration of less than 70 percent by weight.

"Woodworking": the shaping, sawing, grinding, smoothing, polishing and making into products of any form or shape of wood.

(Source: Amended at 12 Ill. Reg. 7621, effective April 11, 1988)

Appendix A
Rule into Section Table

Rule	Section
201	211.121 and 211.122

Appendix B
Section into Rule Table

Section	Rule
211.101	Added in Codification
211.102	Added in Codification
211.121	201
211.122	201
Appendix A	Added in Codification
Appendix B	Added in Codification

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TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

CHAPTER I: POLLUTION CONTROL BOARD

**SUBCHAPTER C: EMISSION STANDARDS AND
LIMITATIONS FOR STATIONARY SOURCES**

PART 212

VISIBLE AND PARTICULATE MATTER EMISSIONS

SUBPART A: GENERAL

Section	
212.100	Scope and Organization
212.110	Measurement Methods
212.111	Abbreviations and Units
212.112	Definitions
212.113	Incorporations by Reference

SUBPART B: VISIBLE EMISSIONS

Section	
212.121	Opacity Standards
212.122	Limitations for Certain New Sources
212.123	Limitations for All Other Sources
212.124	Exceptions
212.125	Determination of Violations
212.126	Adjusted Opacity Standards Procedures

**SUBPART D: PARTICULATE MATTER EMISSIONS
FROM INCINERATORS**

Section	
212.181	Limitations for Incinerators
212.182	Aqueous Waste Incinerators
212.183	Certain Wood Waste Incinerators
212.184	Explosive Waste Incinerators
212.185	Continuous Automatic Stoking Animal Pathological Waste Incinerators

**SUBPART E: PARTICULATE MATTER EMISSIONS
FROM FUEL COMBUSTION EMISSION SOURCES**

Section	
212.201	Existing Sources Using Solid Fuel Exclusively Located in the Chicago Area
212.202	Existing Sources Using Solid Fuel Exclusively Located Outside the Chicago Area
212.203	Existing Controlled Sources Using Solid Fuel Exclusively
212.204	New Sources Using Solid Fuel Exclusively
212.205	Existing Coal-fired Industrial Boilers Equipped with Flue Gas Desulfurization Systems
212.206	Sources Using Liquid Fuel Exclusively
212.207	Sources Using More Than One Type of Fuel
212.208	Aggregation of Existing Sources
212.209	Village of Winnetka Generating Station

SUBPART K: FUGITIVE PARTICULATE MATTER

Section	
212.301	Fugitive Particulate Matter
212.302	Geographical Areas of Application
212.304	Storage Piles
212.305	Conveyor Loading Operations

212.306	Traffic Areas
212.307	Materials Collected by Pollution Control Equipment
212.308	Spraying or Choke-Feeding Required
212.309	Operating Program
212.310	Minimum Operating Program
212.312	Amendment to Operating Program
212.313	Emission Standard for Particulate Collection Equipment
212.314	Exception for Excess Wind Speed
212.315	Covering for Vehicles

**SUBPART L: PARTICULATE MATTER EMISSIONS
FROM PROCESS EMISSION SOURCES**

Section	
212.321	New Process Sources
212.322	Existing Process Sources
212.323	Stock Piles

SUBPART N: FOOD MANUFACTURING

Section	
212.361	Corn Wet Milling Processes

**SUBPART O: PETROLEUM REFINING,
PETROCHEMICAL AND CHEMICAL MANUFACTURING**

Section	
212.381	Catalyst Regenerators of Fluidized Catalytic Converters

**SUBPART Q: STONE, CLAY, GLASS AND
CONCRETE MANUFACTURING**

Section	
212.421	New Portland Cement Processes
212.422	Portland Cement Manufacturing Processes

**SUBPART R: PRIMARY AND FABRICATED METAL
PRODUCTS AND MACHINERY MANUFACTURE**

Section	
212.441	Steel Manufacturing Processes
212.442	Beehive Coke Ovens
212.443	By-Product Coke Plants
212.444	Sinter Processes
212.445	Blast Furnace Cast Houses
212.446	Basic Oxygen Furnaces
212.447	Hot Metal Desulfurization Not Located in the BOF
212.448	Electric Arc Furnaces
212.449	Argon-Oxygen Decarburization Vessels
212.450	Liquid Steel Charging
212.451	Hot Scarfing Machines
212.452	Measurement Methods
212.455	Highlines on Steel Mills
212.456	Certain Small Foundries
212.457	Certain Small Iron-melting Air- Furnaces

SUBPART S: AGRICULTURE

Section	
212.461	Grain Handling and Drying in General
212.462	Grain Handling Operations
212.463	Grain Drying Operations

SUBPART T: CONSTRUCTION AND WOOD PRODUCTS

Section 212.681 Grinding, Woodworking, Sandblasting and Shotblasting

Appendix A: Rule into Section Table
Appendix B: Section into Rule Table
Appendix C: Past Compliance Dates

Illustration A: Allowable Emissions from Solid Fuel Combustion Emission Sources Outside Chicago
Illustration B: Limitations for all New Process Emission Sources
Illustration C: Limitations for all Existing Process Emission Sources

AUTHORITY: Implementing Section 10 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1010 and 1027).

SOURCE: Adopted as Chapter 2: Air Pollution, Rules 202 and 203: Visual and Particulate Emission Standards and Limitations, R71-23, 4 PCB 191, filed and effective April 14, 1972; amended in R77-15, 32 PCB 403, at 3 Ill. Reg. 5, p. 798, effective February 1, 1979; amended in R78-10, 35 PCB 347, at 3 Ill. Reg. 39, p. 184, effective September 28, 1979; amended in R78-11, 35 PCB 505, at 3 Ill. Reg. 45, p. 100, effective October 26, 1979; amended in R78-9, 38 PCB 411, at 4 Ill. Reg. 24, p. 514, effective June 4, 1980; amended in R79-11, 43 PCB 481, at 5 Ill. Reg. 11590, effective October 19, 1981; codified at 7 Ill. Reg. 13591; amended in R82-1 (Docket A), 10 Ill. Reg. 12637, effective July 9, 1986; amended in R85-33 at 10 Ill. Reg. 18030, effective October 7, 1986; amended in R84-48 at 11 Ill. Reg. 691, effective December 18, 1986; amended in R84-42 at 11 Ill. Reg. 1410, effective December 30, 1986; amended in R82-1 (Docket B) at 12 Ill. Reg. 12492, effective July 13, 1988.

SUBPART A: GENERAL

Section 212.100 Scope and Organization

- This Part contains standards and limitations for visual and particulate matter emissions from stationary sources.
- Permits for sources subject to this Part may be required pursuant to 35 Ill. Adm. Code 201.
- Notwithstanding the provisions of this Part, the air quality standards contained in 35 Ill. Adm. Code 243 may not be violated.
- This Part includes Subparts which are arranged as follows:
 - Subpart A: General provisions;
 - Subpart B: Visual emissions;
 - Subparts C-J: Incinerators and fuel combustion emission sources;

4) Subparts K-M: Fugitive and process emission sources;

5) Subparts N-End: Site specific and industry specific rules.

e) Rules have been grouped for the convenience of the public; the scope of each is determined by its language and history.

(Source: Added and codified at 7 Ill. Reg. 13591)

Section 212.110 Measurement Methods

Particulate matter emissions from stationary emission sources subject to this Part shall be determined by the procedures described in the American Society of Mechanical Engineers Power Test Code 27 1957 (Determining Dust Concentration in a Gas Stream) as revised from time to time, or by any other equivalent procedures approved by the Illinois Environmental Protection Agency (Agency).

Section 212.111 Abbreviations and Units

a) The following abbreviations are used in this Part:

btu	British thermal units (60°F)
dscf	dry standard cubic foot
ft	foot
fpm	feet per minute
gr	grains
gr/scf	grains per standard cubic foot
gr/dscf	grains per dry standard cubic foot
J	Joule
kg	kilogram
kg/MW-hr	kilograms per megawatt-hour
km	kilometer
l	liter
lbs	pounds
lbs/MMBtu	pounds per million btu
m	meter
mph	miles per hour
mg	milligram
mg/scm	milligrams per standard cubic meter
mg/dscm	milligrams per dry standard cubic meter
mg/l	milligrams per liter
Mg	megagram, metric ton or tonne
mi	mile
MMBtu	million British thermal units
MMBtu/hr	million British thermal units per hour
MW	megawatt; one million watts
MW-hr	megawatt-hour
ng	nanogram; one billionth of a gram
ng/J	nanograms per Joule
scf	standard cubic foot
scfm	standard cubic feet per minute
scm	standard cubic meter
T	English ton

b) The following conversion factors have been used in this Part:

English	Metric
2.205 lb	1 kg
1 T	0.907 Mg
1 lb/T	0.500 kg/Mg
mmBtu/hr	0.293 MJ
1 lb/mmBtu	1.548 kg/MJ-hr or 430 ng/J
1 mi	1.61 km
1 gr	64.81 mg
1 gr/scf	2289 mg/scm
1 square foot	0.0929 square meter
1 foot	0.3048 m

(Source: Added and codified at 7 III. Reg. 13591)

Section 212.112 Definitions

The definitions of 35 III. Adm. Code 201 and 211 apply to this Part.

(Source: Added and codified at 7 III. Reg. 13591)

Section 212.113 Incorporations by Reference

The following materials are incorporated by reference:

- a) ASME Power Test Code 27-1957, Determining Dust Concentration in a Gas Stream, American Society of Mechanical Engineers, United Engineering Center, 345 E. 47th Street, New York, NY 10017.
- b) Ringelmann Chart, Information Circular 833 (Revision of IC7718), Bureau of Mines, U.S. Department of Interior, May 1, 1967.
- c) 40 CFR 60, (1987).
- d) ASAE Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers, American Society of Agricultural Engineers, 2950 Niles Road, St. Joseph, MI 49085.
- e) U.S. Sieve Series, ASTM-E11, American Society of Testing Materials, 1916 Race Street, Philadelphia, PA 19103.
- f) This Part incorporates no further editions or amendments.

(Source: Amended at 12 III. Reg. 12492, effective July 13, 1988)

SUBPART B: VISIBLE EMISSIONS

Section 212.121 Opacity Standards

For the purposes of this Subpart, all visible emission opacity standards and limitations shall be considered equivalent to corresponding Ringelmann Chart readings, as described under the definition of opacity (35 III. Adm. Code 211.122).

(Source: Amended at 12 III. Reg. 12492, effective July 13, 1988)

Section 212.122 Limitations for Certain New Sources

- a) New Fuel Combustion Emission Sources with Actual Heat Input Greater than 250 mmBtu/hr. No person shall cause or allow the emission of smoke or other particulate matter into the atmosphere from any new fuel combustion emission source with actual heat input greater than 73.2 MJ (250 mmBtu/hr), having an opacity greater than 20 percent.
- b) Exception: The emissions of smoke or other particulate matter from any such emission source may have an opacity greater than 20 percent but not greater than 40 percent for a period or periods aggregating 3 minutes in any 60 minute period, provided that such more opaque emissions permitted during any 60 minute period shall occur from only one such emission source located within a 305 m (1000 ft) radius from the center point of any other such emission source owned or operated by such person and provided further that such more opaque emissions permitted from each such fuel combustion emission source shall be limited to 3 times in any 24 hour period.

Section 212.123 Limitations for All Other Sources

- a) No person shall cause or allow the emission of smoke or other particulate matter with an opacity greater than 30 percent, into the atmosphere from any emission source other than those sources subject to Section 212.122.
- b) Exception: The emission of smoke or other particulate matter from any such emission source may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such more opaque emissions permitted during any 60 minute period shall occur from only one such emission source located within a 305 m (1000 ft) radius from the center point of any other such emission source owned or operated by such person, and provided further that such more opaque emissions permitted from each such emission source shall be limited to 3 times in any 24 hour period.

(Source: Amended at 12 III. Reg. 12492, effective July 13, 1988)

Section 212.124 Exceptions

- a) Startup, Malfunction and Breakdown. Sections 212.122 and 212.123 shall apply during times of startup, malfunction and breakdown except as provided in the operating permit granted in accordance with 35 III. Adm. Code 201.

b) Emissions of water and water vapor. Sections 212.122 and 212.123 shall not apply to emissions of water or water vapor from an emission source.

c) Adjusted standards. An emission source which has obtained an adjusted opacity standard pursuant to Section 212.126 shall be subject to that standard rather than the limitations of Section 212.122 or 212.123.

d) Compliance with the particulate regulations of this Part shall constitute a defense.

- 1) For all emission sources which are not subject to Chapters 111 or 112 of the Clean Air Act (42 U.S.C.A. 7401 et seq.) and Sections 212.201, 212.202, 212.203 or 212.204 but which are subject to Sections 212.122 or 212.123:

The opacity limitations of Sections 212.122 and 212.123 shall not apply if it is shown that the emission source was, at the time of such emission, in compliance with the applicable particulate emissions limitations of Subparts D-F of this Part.

- 2) For all emission sources which are not subject to Chapters 111 or 112 of the Clean Air Act but which are subject to Sections 212.201, 212.202, 212.203 or 212.204 and either Section 212.122 or 212.123:

A) An exceedance of the limitations of Section 212.122 or 212.123 shall constitute a violation of the applicable particulate limitations of Subparts D-F of this Part. It shall be a defense to a violation of the applicable particulate limitations if, during a subsequent performance test conducted within a reasonable time not to exceed 60 days, under the same operating conditions for the source and the control device(s), and in accordance with Method 5, 40 CFR 60, incorporated by reference in Section 212.113, the owner or operator shows that the source is in compliance with the particulate emission limitations.

B) It shall be a defense to an exceedance of the opacity limit if, during a subsequent performance test conducted within a reasonable time not to exceed 60 days, under the same operating conditions of the source and the control device(s), and in accordance with Method 5, 40 CFR 60, Appendix A, incorporated by reference in Section 212.113, the owner or operator shows that the source is in compliance with the allowable particulate emissions limitation while, simultaneously, having visible emissions equal to or greater than the opacity exceedance as originally observed.

(Source: Amended at 12 Ill. Reg. 12492, effective July 13, 1988)

Section 212.125 Determination of Violations

Violations of Sections 212.122 and 212.123 shall be determined:

- By visual observations; or
- By the use of a calibrated smoke evaluation device approved by the Agency as specified in Subpart J of 35 Ill. Adm. Code 201; or
- By the use of a smoke monitor located in the stack and approved by the Agency as specified in Subpart J of 35 Ill. Adm. Code 201.

Section 212.126 Adjusted Opacity Standards Procedures

a) Pursuant to Section 28.1 of the Environmental Protection Act (Act) (Ill. Rev. Stat. 1987 ch. 111 1/2 pars. 1028.1), and in accordance with 35 Ill. Adm. Code 106 Subpart E, adjusted visible emissions standards for emission sources subject to Sections 212.201, 212.202, 212.203, or 212.204 and either Section 212.122 or 212.123 shall be granted by the Board to the extent consistent with federal law based upon a demonstration by such a source that the results of a performance test conducted pursuant to this Section, Section 212.110, and Methods 5 and 9 of 40 CFR 60, Appendix A, incorporated by reference in Section 212.113, show that the source meets the applicable particulate emission limitations at the same time that the visible emissions exceed the otherwise applicable standards of Sections 212.121-212.125. Such adjusted opacity limitations:

- Shall be specified as a condition in operating permits issued pursuant to 35 Ill. Adm. Code 201;
- Shall substitute for that limitation otherwise applicable;
- Shall not allow an opacity greater than 60 percent at any time; and
- Shall allow opacity for one six-minute averaging period in any 60 minute period to exceed the adjusted opacity standard.

b) For the purpose of establishing an adjusted opacity standard, any owner or operator of an emission source which meets the requirements of subsection (a), above, may request the Agency to determine the average opacity of the emissions from the emission source during any performance test(s) conducted pursuant to Section 212.110 and Methods 5 and 9 of 40 CFR 60, Appendix A, incorporated by reference in Section 212.113. The Agency shall refuse to accept the results of emissions tests if not conducted pursuant to this Section.

c) Any request for the determination of the average opacity of emissions shall be made in

writing, shall include the time and place of the performance test and test specifications and procedures, and shall be submitted to the Agency at least thirty days before the proposed test date.

- d) The Agency will advise the owner or operator of an emission source which has requested an opacity determination of any deficiencies in the proposed test specifications and procedures as expeditiously as practicable but no later than 10 days prior to the proposed test date so as to minimize any disruption of the proposed testing schedule.
- e) The owner or operator shall allow Agency personnel to be present during the performance test.
- f) The method for determining an adjusted opacity standard is as follows:
 - 1) A minimum of 60 consecutive minutes of opacity readings obtained in accordance with USEPA Test Method 9, 40 CFR 60, Appendix A, incorporated by reference in Section 212.113, shall be taken during each sampling run. Therefore, for each performance test (which normally consists of three sampling runs), a total of three sets of opacity readings totaling three hours or more shall be obtained. Concurrently, the particulate emissions data from three sampling runs obtained in accordance with USEPA Test Method 5, 40 CFR 60, Appendix A, incorporated by reference in Section 212.113, shall also be obtained.
 - 2) After the results of the performance tests are received from the emission source, the status of compliance with the applicable particulate emissions limitation shall be determined by the Agency. In accordance with USEPA Test Method 5, 40 CFR 60, Appendix A, incorporated by reference in Section 212.113, the average of the results of the three sampling runs must be less than the allowable particulate emission rate in order for the source to be considered in compliance. If compliance is demonstrated, then only those test runs with results which are less than the allowable particulate emission rate shall be considered as acceptable test runs for the purpose of establishing an adjusted opacity standard.
 - 3) The opacity readings for each acceptable sampling run shall be divided into sets of 24 consecutive readings. The 6-minute average opacity for each set shall be determined by dividing the sum of the 24 readings within each set by 24.
 - 4) The second highest six-minute average opacity obtained in (f)(3) above shall be selected as the adjusted opacity standard.
- g) The owner or operator shall submit a written report of the results of the performance test to the Agency at least 30 days prior to

filing a petition for an adjusted standard with the Board.

- h) If, upon review of such owner's or operator's written report of the results of the performance test(s), the Agency determines that the emission source is in compliance with all applicable emission limitations for which the performance tests were conducted, but fails to comply with the requirements of Section 212.122 or 212.123, the Agency shall notify the owner or operator as expeditiously as practicable, but no later than 20 days after receiving the written report of any deficiencies in the results of the performance tests.
- i) The owner or operator may petition the Board for an adjusted visible emission standard pursuant to 35 Ill. Adm. Code 106 Subpart E. In addition to the requirements of 35 Ill. Adm. Code 106 Subpart E the petition shall include the following information:
 - 1) A description of the business or activity of the petitioner, including its location and relevant pollution control equipment;
 - 2) The quantity and type of materials discharged from the source or control equipment for which the adjusted standard is requested;
 - 3) A copy of any correspondence between the petitioner and the Agency regarding the performance test(s) which form the basis of the adjusted standard request;
 - 4) A copy of the written report submitted to the Agency pursuant to subsection (g) above;
 - 5) A statement that the performance test(s) were conducted in accordance with this Section and the conditions and procedures accepted by the Agency pursuant to Section 212.110;
 - 6) A statement regarding the specific limitation requested; and
 - 7) A statement as to whether the Agency has sent notice of deficiencies in the results of the performance test pursuant to subsection (h) above and a copy of said notice.
- j) In order to qualify for an adjusted standard the owner or operator must justify as follows:
 - 1) That the performance test(s) were conducted in accordance with USEPA Test Methods 5 and 9, 40 CFR 60, Appendix A, incorporated by reference in Section 212.113, and the conditions and procedures accepted by the Agency pursuant to Section 212.110;
 - 2) That the emission source and associated air pollution control equipment were operated and maintained in a manner so as

to minimize the opacity of the emissions during the performance test(s); and

- 3) That the proposed adjusted opacity standard was determined in accordance with subsection (f).

- k) Nothing in this Section shall prevent any person from initiating or participating in a rulemaking, variance, or permit appeal proceeding before the Board.

(Source: Added at 12 Ill. Reg. 12492, effective July 13, 1988)

SUBPART 0: PARTICULATE MATTER EMISSIONS FROM INCINERATORS

Section 212.181 Limitations for Incinerators

- a) No person shall cause or allow the emission of particulate matter into the atmosphere from any incinerator burning more than 27.2 Mg (60,000 lbs) of refuse per hour to exceed 115 mg (0.05 gr/scf) of effluent gases corrected to 12 percent carbon dioxide.
- b) No person shall cause or allow the emission of particulate matter into the atmosphere from any incinerator burning more than 0.907 Mg (2000 lbs) but less than 27.2 Mg (60,000 lbs) of refuse per hour to exceed 183 mg (0.08 gr/scf) of effluent gases corrected to 12 percent carbon dioxide.
- c) No person shall cause or allow the emission of particulate matter into the atmosphere from all other existing incinerators to exceed 458 mg (0.2 gr/scf) of effluent gases corrected to 12 percent carbon dioxide.
- d) No person shall cause or allow the emission of particulate matter into the atmosphere from all other new incinerators to exceed 229 mg (0.1 gr/scf) of effluent gases corrected to 12 percent carbon dioxide.

(Source: Amended at 4 Ill. Reg. 514, effective June 4, 1980)

Section 212.182 Aqueous Waste Incinerators

Section 212.181(d) shall not apply to aqueous waste incinerators which, when corrected to 50 percent excess air for combined fuel and charge incineration, produce stack gas containing carbon dioxide dry-basis volume concentrations of less than 1.2 percent from the charge alone if all the following conditions are met:

- a) The emission of particulate matter into the atmosphere from any such new or existing incinerator does not exceed 229 mg (0.1 gr/scf), dry basis, when corrected to 50 percent excess air for combined fuel and charge incineration.
- b) The waste charge to the incinerator does not exceed 907 kg (2000 lbs) per hour.

(Source: Amended at 4 Ill. Reg. 514, effective June 4, 1980)

Section 212.183 Certain Wood Waste Incinerators

Exception: Section 212.181(a), (b) and (d) shall not apply to incinerators which burn wood wastes exclusively, if all the following conditions are met:

- a) The emission of particulate matter from such incinerator does not exceed 458 mg (0.2 gr/scf) of effluent gases corrected to 12 percent carbon dioxide; and,
- b) The location of such incinerator is not in a restricted area, and is more than 305 m (1000 ft) from residential or other populated areas; and,
- c) When it can be affirmatively demonstrated that no economically reasonable alternative method of disposal is available.

(Source: Amended at 4 Ill. Reg. 514, effective June 4, 1980)

Section 212.184 Explosive Waste Incinerators

- a) Section 212.181 shall not apply to certain existing small explosive waste incinerators if all the following conditions are met:
- 1) The incinerator burns explosives or explosive contaminated waste exclusively;
 - 2) The incinerator burns 227 kg (500 lbs) of waste per hour or less;
 - 3) All incinerators on the same site operate a total of six hours or less in any day;
 - 4) The incinerator was in existence prior to December 6, 1976, and is located in Williamson County in Section 3, Township 9 South, Range 2 East of the Third Principal Meridian.
- b) No person shall cause or allow the emission of particulate matter into the atmosphere from any such existing small explosive waste incinerator to exceed 7140 mg/kg (50.0 gr/lb) of combined waste and auxiliary fuel burned.

(Source: Amended at 4 Ill. Reg. 514, effective June 4, 1980)

Section 212.185 Continuous Automatic Stoking Animal Pathological Waste Incinerators

- a) For purposes of this Section, the following definitions apply: "Animal Pathological Waste" means waste composed of whole or parts of animal carcasses and also noncarcass materials such as plastic, paper wrapping and animal collars. Noncarcass materials shall not exceed ten percent by weight of the total weight of the carcass and noncarcass

materials combined. "Animal" means any organism other than a human being of the kingdom, Animal, distinguished from plants by certain typical characteristics such as the power of locomotion, fixed structure and limited growth, and non-photosynthetic metabolism. "Continuous automatic stoking" means the automatic moving of animal pathological waste during burning, by moving the hearth in a pulse cycle manner, which process is designed to provide a continuous burning rate in which the design charging rate per hour equals the burning rate every hour without limitation, and results in emission rates which are similar over any hour of the burning process.

b) Section 212.181 shall not apply to continuous automatic stoking pathological waste incinerators if all of the following conditions are met:

- 1) The incinerator shall burn animal pathological waste exclusively, except as otherwise prescribed by the Agency during specified test operation.
- 2) The incinerator shall burn no more than 907 kilograms (2000 pounds) of waste per hour.
- 3) The incinerator shall be multi-stage controlled air combustion incinerator having cyclical pulsed stoking hearth.

c) No person shall cause or allow the emission of particulate matter into the atmosphere from any incinerator, as defined in this section, to exceed 1 gram of emission per 1 kilogram of animal pathological waste charge (0.1 lb/100 lb).

d) The particulate matter emissions produced when burning animal pathological waste using gaseous auxiliary fuel, such as natural gas, shall not exceed the pound per hour emission rate equivalent to the maximum concentration rate set forth in Section 212.181(d), when applied to burning a maximum of 2000 lb of mixed charge animal pathological waste plus solid waste for demonstration of compliance. "Mixed charge" shall contain no more than 25% by weight of solid waste other than animal pathological waste.

(Source: Added at 11 Ill. Reg. 1410, effective December 30, 1986)

SUBPART E: PARTICULATE MATTER EMISSIONS FROM FUEL COMBUSTION EMISSION SOURCES

Section 212.201 Existing Sources Using Solid Fuel Exclusively Located in the Chicago Area

No person shall cause or allow the emission of particulate matter into the atmosphere from any existing fuel combustion source using solid fuel exclusively, located in the Chicago Major Metropolitan Area, to exceed 0.15 kg of particulate matter per MW-hr of actual heat

input in any one hour period (0.1 lbs/Mbtu/hr) except as provided in Section 212.203.

(Source: Amended at 10 Ill. Reg. 12637, effective July 9, 1986)

Section 212.202 Existing Sources Using Solid Fuel Exclusively Located Outside the Chicago Area

No person shall cause or allow the emission of particulate matter into the atmosphere from any existing fuel combustion source using solid fuel exclusively, which is located outside the Chicago major metropolitan area, to exceed the limitations specified in the table below and Illustration A in any one hour period except as provided in Section 212.203.

METRIC UNITS

<u>H (Range)</u> <u>Megawatts</u>	<u>S</u> <u>Kilograms per</u> <u>megawatt</u>
Less than or equal to 2.93	1.55
Greater than 2.93 but smaller than 73.2	3.33H-0.715
Greater than or equal to 73.2	0.155

ENGLISH UNITS

<u>H (Range)</u> <u>Million Btu per hour</u>	<u>S</u> <u>Pounds per</u> <u>million Btu</u>
Less than or equal to 10	1.0
Greater than 10 but smaller than 250	5.18H-0.715
Greater than or equal to 250	0.10.1

where:

S = Allowable emission standard in lbs/Mbtu/hr or kg/M of actual heat input, and
H = Actual heat input in million Btu per hour or megawatts

(Source: Amended at 10 Ill. Reg. 12637, effective July 9, 1986)

Section 212.203 Existing Controlled Sources Using Solid Fuel Exclusively

Notwithstanding Sections 212.201 and 212.202, any existing fuel combustion source using solid fuel exclusively may, in any one hour period, emit up to, but not exceed 0.31 kg/M/hr (0.2 lbs/Mbtu), if, as of April 14, 1977, any one of the following conditions was met:

- a) The emission source had an hourly emission rate based on original design or equipment performance test conditions, whichever is stricter, which was less than 0.31 kg/M-hr (0.20 lbs/Mbtu) of actual heat input, and the emission control of such source is not

allowed to degrade more than 0.077 kg/MW-hr (0.05 lbs/MMBtu) from such original design or acceptance performance test conditions; or.

b) The source was in full compliance with the terms and conditions of a variance granted by the Pollution Control Board (Board) sufficient to achieve an hourly emission rate less than 0.31 kg/MW-hr (0.20 lbs/MMBtu), and construction has commenced on equipment or modifications prescribed under that program; and emission control of such source is not allowed to degrade more than 0.077 kg/MW-hr (0.05 lbs/MMBtu) from original design or equipment performance test conditions, whichever is stricter.

c) The emission source had an hourly rate based on original design or equipment performance test conditions, whichever is stricter, which was less than 0.31 kg/MW-hr (0.20 lbs/MMBtu) of actual heat input, and the emission control of such source is not allowed to degrade more than 0.077 kg/MW-hr (0.05 lbs/MMBtu) from that rate demonstrated by the most recent stack test, submitted to and accepted by the Agency prior to April 1, 1985, provided that:

- 1) Owners and operators of sources subject to this subsection shall apply for a new operating permit within 180 days of the effective date of this section; and
- 2) The application for a new operating permit shall include a demonstration that the proposed emission rate, if greater than the emission rate allowed by subsections (a) or (b) of this section, will not under any foreseeable operating conditions and potential meteorological conditions cause or contribute to a violation of any applicable primary or secondary ambient air quality standard for particulate matter, or violate any applicable prevention of significant deterioration (PSD) increment, or violate 35 Ill. Adm. Code 201.141.

(Source: Amended at 10 Ill. Reg. 12637, effective July 9, 1986)

Section 212.204 New Sources Using Solid Fuel Exclusively

No person shall cause or allow the emission of particulate matter into the atmosphere from any new fuel combustion emission source using solid fuel exclusively to exceed 0.15 kg of particulate matter per MW-hr of actual heat input (0.1 lbs/MMBtu) in any one hour period.

(Source: Amended at 10 Ill. Reg. 12637, effective July 9, 1986)

Section 212.205 Existing Coal-Fired Industrial Boilers Equipped with Flue Gas Desulfurization Systems

Notwithstanding Sections 212.201 through 212.204, no person shall cause or allow the emission of particulate matter into the atmosphere from existing coal-fired industrial boilers equipped with flue gas desulfurization systems to exceed 0.39 kg of particulate matter per MW-hr of actual heat input in any one-hour period (0.25 lbs/MMBtu). Nothing in this rule shall be construed to prevent compliance with applicable regulations in 35 Ill. Adm. Code 230.

(Source: Amended at 5 Ill. Reg. 11590, effective October 19, 1981)

Section 212.206 Sources Using Liquid Fuel Exclusively

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission source using liquid fuel exclusively (0.10 lbs/MMBtu).

Section 212.207 Sources Using More Than One Type of Fuel

a) No person, while simultaneously burning more than one type of fuel in a fuel combustion emission source, shall cause or allow the emission of particulate matter into the atmosphere in any one hour period in excess of the following equation:

$$E = AS + BL$$

b) Symbols in the equation mean the following:

- E = Allowable emission rate;
- A = Solid fuel particulate emission standard which is applicable;
- B = Constant determined from the table in subsection (c);
- S = Actual heat input from solid fuel;
- L = Actual heat input from liquid fuel.

c) The metric and English units to be used in the equation of subsection (a) are as follows:

Parameter	Metric	English
E	kg/hr	lbs/hr
A	kg/MW-hr	lbs/MMBtu
B	0.155	0.10
S	MW	MMBtu/hr
L	MW	MMBtu/hr

Section 212.208 Aggregation of Existing Sources

Section 212.207 may be applied to the aggregate of all fuel combustion emission sources vented to a common stack provided that after January 26, 1972:

- a) Ductwork has not been modified so as to interconnect such existing fuel combustion emission sources;
- b) The actual heat input to any such existing fuel combustion emission source is not increased; and
- c) No new fuel combustion emission source is added to reduce the degree of control of emissions of particulate matter required by this Subpart.

Section 212.209 Village of Winnetka Generating Station

Notwithstanding any other requirements of this Part, if the Village of Winnetka files a petition to establish site-specific particulate standards for its generating station within 60 days of the effective date of the rules adopted under docket R82-1, the Village of Winnetka's generating station shall not emit particulates at a level more than 0.25 lbs/Mbtu until January 1, 1989, or until a final determination is made on that site-specific rulemaking, whichever occurs sooner.

(Source: Added at 10 Ill. Reg. 12637, effective July 9, 1986)

SUBPART K: FUGITIVE PARTICULATE MATTER

Section 212.301 Fugitive Particulate Matter

No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the emission source.

(Source: Amended at 3 Ill. Reg. 100, effective October 26, 1979)

Section 212.302 Geographical Areas of Application

Except for those operations subject to Subpart S (Grain-Handling and Grain-Drying Operations), Sections 212.304 through 212.310 and 212.312 shall apply to all mining operations (SIC major groups 10 through 14), manufacturing operations (SIC major groups 20 through 39), and electric generating operations (SIC group 491), which are located in the areas defined by the boundaries of the following townships, notwithstanding any political subdivisions contained therein, as the township boundaries were defined on October 1, 1979, in the following counties:

Cook:	All townships
Lake:	Shields, Waukegan, Warren
DuPage:	Addison, Winfield, York
Will:	DuPage, Plainfield, Lockport, Channahon, Peotone, Florence, Joliet
Peoria:	Richwoods, Limestone, Hollis, Peoria, City of Peoria
Tazewell:	Fondulac, Pekin, Cincinnati, Groveland, Washington
Macon:	Decatur, Hickory Point
Rock Island:	Blackhawk, Coal Valley, Hampton, Moline, South Moline, Rock Island, South Rock Island
LaSalle:	LaSalle, Utica
Madison:	Alton, Chouteau, Collinsville, Edwardsville, Fort Russell, Godfrey, Granite City, Mameoki, Venice, Wood River
St. Clair:	Easteen, Easseyville, Centerville, St. Clair, Stites, Stooky, Sugar Loaf, Millstadt

(Source: Amended at 3 Ill. Reg. 100, effective October 26, 1979)

Section 212.304 Storage Piles

- a) All storage piles of materials with uncontrolled emissions of fugitive particulate matter in excess of 45.4 Mg per year (50 T/year) which are located within a facility whose potential particulate emissions from all sources exceed 90.8 Mg per year (100 T/year) shall be protected by a cover or sprayed with a surfactant solution or water on a regular basis, as needed, or treated by an equivalent method, in accordance with the operating program required by Sections 212.109, 212.110 and 212.312.

- b) Exception: Subsection (a) shall not apply to a specific storage pile if the owner or operator of that pile proves to the Agency that fugitive particulate emissions from that pile do not cross the property line either by direct wind action or reentrainment.

(Source: Amended at 3 Ill. Reg. 100, effective October 26, 1979)

Section 212.305 Conveyor Loading Operations

All conveyor loading operations to storage piles specified in Section 212.304 shall utilize spray systems, telescopic chutes, stone ladders or other equivalent methods in accordance with the operating program required by Sections 212.109, 212.310 and 212.312.

(Source: Amended at 3 Ill. Reg. 100, effective October 26, 1979)

Section 212.306 Traffic Areas

All normal traffic pattern access areas surrounding storage piles specified in Section 212.304 and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Sections 212.309, 212.310 and 212.312.

(Source: Amended at 3 Ill. Reg. 100, effective October 26, 1979)

Section 212.307 Materials Collected by Pollution Control Equipment

All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

(Source: Amended at 3 Ill. Reg. 100, effective October 26, 1979)

Section 212.308 Spraying or Choke-Feeding Required

Crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.

(Source: Amended at 3 Ill. Reg. 100, effective October 26, 1979)

Section 212.309 Operating Program

The sources described in Sections 212.304 through 212.308 shall be operated under the provisions of an operating program prepared by the owner or operator and submitted to the Agency for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

(Source: Amended at 3 Ill. Reg. 100, effective October 26, 1979)

Section 212.310 Minimum Operating Program

As a minimum the operating program shall include the following:

- a) The name and address of the facility;
- b) The name and address of the owner or operator responsible for execution of the operating program;

c) A map or diagram of the facility showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the facility;

d) Location of unloading and transporting operations with pollution control equipment;

e) A detailed description of the best management practices utilized to achieve compliance with this Subpart, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants and equivalent methods utilized;

f) Estimated frequency of application of dust suppressants by location of materials; and

g) Such other information as may be necessary to facilitate the Agency's review of the operating program.

(Source: Amended at 3 Ill. Reg. 100, effective October 26, 1979)

Section 212.312 Amendment to Operating Program

The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with this Subpart and shall be submitted to the Agency for its review.

(Source: Amended at 3 Ill. Reg. 100, effective October 26, 1979)

Section 212.313 Emission Standard for Particulate Collection Equipment

If particulate collection equipment is operated pursuant to Sections 212.304 through 212.310 and 212.312, emissions from such equipment shall not exceed 60 mg/dscm (0.03 gr/dscf).

(Source: Amended at 3 Ill. Reg. 100, effective October 26, 1979)

Section 212.314 Exception for Excess Wind Speed

Section 212.301 shall not apply and spraying pursuant to Sections 212.304 through 212.310 and 212.312 shall not be required when the wind speed is greater than 40.2 kilometers per hour (25 miles per hour). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on site wind speed instrument measurements.

(Source: Amended at 3 Ill. Reg. 100, effective October 26, 1979)

Section 212.315 Covering for Vehicles

No person shall cause or allow the operation of a vehicle of the second division as defined by Ill. Rev. Stat. 1981, ch. 95 1/2, pars. 1-217, as revised, or a semi-trailer as defined by Ill. Rev. Stat. 1981, ch. 95 1/2, pars. 1-187, as revised, without a covering sufficient to prevent the release of particulate matter into the atmosphere, provided that this rule shall not pertain to automotive exhaust emissions.

(Source: Amended at 3 Ill. Reg. 100, effective October 26, 1979)

SUBPART L: PARTICULATE MATTER EMISSIONS FROM PROCESS EMISSION SOURCES

Section 212.321 New Process Sources

a) Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission source which, either alone or in combination with the emission of particulate matter from all other similar new process emission sources at a plant or premises, exceeds the allowable emission rates specified in subsection (c) and Illustration B.

b) Interpolated and extrapolated values of the data in subsection (c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = process weight rate; and,
E = allowable emission rate; and,

1) Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

2) For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

c) Limits for New Process Emission Sources

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9	3.9	10.00	8.70
13	4.8	15.00	10.80
18	5.7	20.00	12.50
23	6.5	25.00	14.00
27	7.1	30.00	15.60
32	7.7	35.00	17.00
36	8.2	40.00	18.20
41	8.8	45.00	19.20
45	9.3	50.00	20.50
90	13.4	100.00	29.50
140	17.0	150.00	37.00
180	19.4	200.00	43.00
230	22	250.00	48.50
270	24	300.00	53.00
320	26	350.00	58.00
360	28	400.00	62.00
408	30.1	450.00	66.00
454	30.4	500.00	67.00

where:

P = Process weight rate in metric or English tons per hour, and
E = Allowable emission rate in kilograms or pounds per hour.

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

Section 212.322 Existing Process Sources

a) Except as further provided in this Part, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any existing process emission source which, either alone or in combination with the emission of particulate matter from all other similar new or existing process emission sources at a plant or premises, exceeds the allowable emission rates specified in subsection (c) and Illustration C.

b) Interpolated and extrapolated values of the data in subsection (c) shall be determined by using the equation:

$$E = C + A(P)^B$$

where:

P = process weight rate; and.
E = allowable emission rate; and.

- 1) For process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.18
B	0.67	0.67
C	0	0

- 2) For process weight rates in excess of 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

c) Limits for Existing Process Emission Sources

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.20	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9	8.7	10.00	19.20
13	11.1	15.00	25.20
18	13.8	20.00	30.50
23	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32	18.8	35.00	41.30
36	19.3	40.00	42.50
41	19.8	45.00	43.60
45	20.2	50.00	44.60
90	23.2	100.00	51.20
140	25.3	150.00	55.40
180	26.5	200.00	58.60
230	27.7	250.00	61.00
270	28.5	300.00	63.10
320	29.4	350.00	64.90
360	30.0	400.00	66.20
400	30.6	450.00	67.70
454	31.3	500.00	69.00

where:

P = Process weight rate in metric or English tons per hour, and

E = Allowable emission rate in kilogram, or pounds per hour.

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

Section 212.323 Stock Piles

Sections 212.321 and 212.322 shall not apply to emission sources, such as stock piles of particulate matter, to which, because of the disperse nature of such emission sources, such rules cannot reasonably be applied.

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

SUBPART N: FOOD MANUFACTURING

Section 212.361 Corn Wet Milling Processes

Sections 212.321 and 212.322 shall not apply to feed and gluten dryers in corn wet milling processes, where the exit gases have a dew point higher than the ambient temperature and the specific gravity of the material processed is less than 2.0. No person shall cause or allow the emission of particulate matter into the atmosphere from any such process so as to exceed the emission standards and limitations specified in Section 212.322.

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

SUBPART O: PETROLEUM REFINING, PETROCHEMICAL AND CHEMICAL MANUFACTURING

Section 212.381 Catalyst Regenerators of Fluidized Catalytic Converters

Sections 212.321 and 212.322 shall not apply to catalyst regenerators of fluidized catalytic converters. No person shall cause or allow the emission rate from new and existing catalyst regenerators of fluidized catalytic converters to exceed in any one hour period the rate determined using the following equations:

$E = 4.10 (P)^{0.67}$ for P less than or equal to 30 tons per hour.

$E = (55.0 (P)^{0.11}) - 40.0$ for P greater than 30 tons per hour.

where:

E = allowable emission rate in pounds per hour, and

P = catalyst recycle rate, including the amount of fresh catalyst added, in tons per hour.

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

**SUBPART Q: STONE, CLAY, GLASS
AND CONCRETE MANUFACTURING**

Section 212.421 New Portland Cement Processes

No person shall cause or allow the emission of smoke or other particulate matter from any new portland cement process into the atmosphere having an opacity greater than 10 percent.

Section 212.422 Portland Cement Manufacturing Processes

Section 212.321 shall not apply to the kilns and coolers of portland cement manufacturing processes.

a) The kilns and clinker coolers of existing portland cement manufacturing processes shall comply with the emission standards and limitations of Section 212.322.

b) The kilns and clinker coolers of new portland cement manufacturing processes shall comply with the following emission standards and limitations:

1) No person shall cause or allow the emission of particulate matter into the atmosphere from any such kiln to exceed 0.3 pounds per ton of feed to the kiln.

2) No person shall cause or allow the emission of particulate matter into the atmosphere from any such clinker cooler to exceed 0.1 pounds per ton of feed to the kiln.

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

**SUBPART R: PRIMARY AND FABRICATED METAL
PRODUCTS AND MACHINERY MANUFACTURE**

Section 212.441 Steel Manufacturing Processes

Except where noted, Sections 212.321 and 212.322 shall not apply to the steel manufacturing processes subject to Sections 212.442 through 212.452.

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

Section 212.442 Beehive Coke Ovens

No person shall cause or allow the use of beehive ovens in any coke manufacturing process.

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

Section 212.443 By-Product Coke Plants

a) Subpart B shall not apply to by-product coke plants.

b) Charging:

i) Uncaptured Emissions

A) No person shall cause or allow the emission of visible particulate matter from any coke oven charging operation, from the introduction of coal into the first charge port, as indicated by the first mechanical movement of the coal feeding mechanism on the tarry car, to the replacement of the final charge port lid for more than a total of 125 seconds over 5 consecutive charges; provided however that 1 charge out of any 20 consecutive charges may be deemed an uncountable charge at the option of the operator.

B) Compliance with the limitation set forth in subsection (A) shall be determined in the following manner:

i) Observation of charging emissions shall be made from any point or points on the top side of a coke oven battery from which a qualified observer can obtain an unobstructed view of the charging operation.

ii) The qualified observer shall time the visible emissions with a stopwatch while observing the charging operation. Only emissions from the charge port and any part of the tarry car shall be timed. The observation shall commence as soon as coal is introduced into the first charge port as indicated by the first mechanical movement of the coal feeding mechanism on the tarry car and shall terminate when the last charge port lid has been replaced. Simultaneous emissions from more than one emission point shall be timed and recorded as one emission and shall not be added individually to the total time.

iii) The qualified observer shall determine and record the total number of seconds that charging emissions are visible during the charging of coal to the coke oven.

iv) For each charge observed, the qualified observer shall record the total number of seconds of visible emissions, the clock time for the initiation and completion of the charging operation and the battery identification and oven number.

v) The qualified observer shall not record any emissions observed after all charging port lids have been firmly sealed following removal of the larry car, such as emissions occurring when a lid has been temporarily removed to permit spilled coal to be swept into the oven.

vi) In the event that observations from a charge are interrupted the data from the charge shall be invalidated and the qualified observer shall note on his observation sheet the reason for invalidating the data. The qualified observer shall then resume observation of the next consecutive charge or charges and continue until a set of five charges has been recorded. Charges immediately preceding and following interrupted observations shall be considered consecutive.

2) Emissions From Control Equipment

A) Emissions of particulate matter from control equipment used to capture emissions during charging shall not exceed 0.046 gm/dscm (0.020 gr/dscf). Compliance shall be determined in accordance with the procedures set forth in 35 III. Adm. Code 230, Appendix A (40 CFR 60, Appendix A, Methods 1-5).

B) The opacity of emissions from control equipment shall not exceed an average of 20%, averaging the total number of readings taken. Opacity readings shall be taken at 15-second intervals from the introduction of coal into the first charge port as indicated by the first mechanical movement of the coal feeding mechanism on the larry car to the replacement of the final charge port lid. Compliance shall be determined in accordance with 35 III. Adm. Code 230, Appendix A (40 CFR 60, Appendix A, Method 9), except for the number of readings required.

C) Opacity readings of emissions from control equipment shall be taken concurrently with observations of fugitive particulate matter. Two qualified observers shall be required.

3) Qualified observers referenced in subsection (b) shall be certified pursuant to 35 III. Adm. Code 230, Appendix A (40 CFR 60, Appendix A, Method 9).

c) Pushing:

1) Uncaptured Emissions

A) Emissions of fugitive particulate matter from pushing operations shall not exceed an average of 20% opacity for 4 consecutive pushes considering the highest average of six consecutive readings in each push. Opacity readings shall be taken at 15-second intervals, beginning from the time the coke falls into the receiving car or is first visible as it emerges from the coke guide whichever occurs earlier, until the receiving car enters the quench tower or quenching device. For a push of less than 90 seconds duration, the actual number of 15-second readings shall be averaged.

B) Opacity readings shall be taken by a qualified observer located in a position where the oven being pushed, the coke receiving car and the path to the quench tower are visible. The opacity shall be read as the emissions rise and clear the top of the coke battery gas mains. The qualified observer shall record opacity readings of emissions originating at the receiving car and associated equipment and the coke oven, including the standpipe on the coke side of the oven being pushed. Opacity readings shall be taken in accordance with the procedures set forth in 35 III. Adm. Code 230, Appendix A (40 CFR 60, Appendix A, Method 9), except that Section 2.5 for data reduction shall not be used. The qualified observer referenced in this subsection shall be certified pursuant to 35 III. Adm. Code 230, Appendix A (40 CFR 60, Appendix A, Method 9).

2) Emissions from Control Equipment

A) The particulate emissions from control equipment used to control emissions during pushing operations shall not exceed 0.040 pounds per ton of coke pushed. Compliance shall be determined in accordance with the procedures set forth in 35 III. Adm. Code 230, Appendix A (40 CFR 60, Appendix A, Methods 1-5) and shall be based on an arithmetic average of three runs (stack tests) and the calculations shall be based on the duration of a push as defined in subsection (c)(1)(A).

B) The opacity of emissions from control equipment used to control emissions during pushing operations shall not exceed 20%. For a push of less than six minutes duration, the actual number of 15-second readings taken shall be averaged. Compliance shall be determined in accordance with 35

111. Adm. Code 230. Appendix A (40 CFR 60, Appendix A, Method 9), except that Section 2.5 for data reduction shall not be used for pushes of less than six minutes duration.

d) Coke Oven Doors:

- 1) No person shall cause or allow visible emissions from more than 10% of all coke oven doors at any time. Compliance shall be determined by a one pass observation of all coke oven doors on any one battery.
- 2) No person shall cause or allow the operation of a coke oven unless there is on the plant premises at all times an adequate inventory of spare coke oven doors and seals and unless there is a readily available coke oven door repair facility.

e) Coke Oven Lids: No person shall cause or allow visible emission from more than 5% of all coke oven lids at any time. Compliance shall be determined by a one pass observation of all coke oven lids.

f) Coke Oven Offtake Piping: No person shall cause or allow visible emissions from more than 10% of all coke oven offtake piping at any time. Compliance shall be determined by a one pass observation of all coke oven offtake piping.

g) Coke Oven Combustion Stack: No person shall cause or allow the emission of particulate matter from a coke oven combustion stack to exceed 110 mg/dscm (0.05 gr/dscf).

h) Quenching: All coke oven quench towers shall be equipped with grit arrestors or equipment of comparable effectiveness. The make-up water shall not directly include coke by-product plant effluent. Total dissolved solids concentrations in the make-up water shall not exceed 1500 mg/l. Provided, however, that the limitations on the quality of quench make-up water shall not apply where the operator employs an equivalent method of control as determined by the Agency.

i) Work Rules: No person shall cause or allow the operation of a by-product coke plant except in accordance with operating and maintenance work rules approved by the Agency.

(Source: Amended in R85-33 at 10 111. Reg. 18030, effective October 7, 1986)

Section 212.444 Sinter Processes

Emissions of particulate matter from sinter processes shall be controlled as follows:

a) Breaker Box: No person shall cause or allow the emission of particulate matter into the atmosphere from the breaker stack of any sinter process to exceed the allowable emission rate specified by Section 212.321.

b) Main Windbox: No person shall cause or allow the emission of particulate matter into the atmosphere from the main windbox of any existing sinter process to exceed 1.2 times the allowable emission rate specified by Section 212.321.

c) Balling Mill Drum, Mixing Drum, Pug Mill and Cooler: No person shall cause or allow the emission of visible particulate matter into the atmosphere from any balling mill drum, mixing drum, pug mill or cooler to exceed 30% opacity.

d) Hot and Cold Screens:

1) Particulate matter emissions from all hot and cold screens shall be controlled by air pollution control equipment or an equivalent dust suppression system. Emissions from said air pollution control equipment shall not exceed 69 mg/dscm (0.03 gr/dscf).

2) Provided, however, that if the owner or operator can establish that the particulate matter emissions from the hot screens and cold screens do not exceed the aggregate of the allowable emissions as specified by Section 212.321 for new emission sources or Section 212.322 for existing emission sources, whichever is applicable, then subsection (d)(1) above shall not apply.

(Source: Amended at 3 111. Reg. 184, effective September 28, 1979)

Section 212.445 Blast Furnace Cast Houses

a) Particulate matter emissions from the blast furnace casting operation into the ambient air shall not exceed the allowable emission rate specified in Section 212.321, calculated and measured as follows:

1) For purposes of this rule, the casting operation for each furnace shall be considered as a separate operation and the process weight ("P") in the calculation shall be the total weight of the iron and slag entering the cast house during the casting operation.

2) Measurement method.

A) Application. This test procedure shall be used to determine compliance with this subsection (a). Blast Furnace Cast Houses. If the United States Environmental Protection Agency (USEPA) adopts a test procedure to sample particulate emissions from blast furnace cast houses, that test procedure may be substituted for the one specified in this paragraph upon publication in the Federal Register.

B) Measurement Equipment for this Test Procedure. The measurement equipment

used for this test procedure shall consist of the following:

- i) High Volume Air Samplers with 0.3 micron glass fiber filters shall be used for the determination of cast house particulate emission concentrations.
- ii) Velocity measurements shall be determined by the use of a suitable instrument designed for the accurate determination of velocities within the range encountered during the sampling duration.
- iii) Temperature measurements shall be determined by the use of a suitable instrument designed for the accurate determination of temperature within the range encountered during the sampling duration.

C) Test Procedure.

- i) Sampling Time Duration: Sampling and opacity observations will initiate with the opening of the tap hole and terminate with the plugging of the tap hole.
- ii) Opacity Observations: Opacity observations of the cast house roof monitor particulate emissions into the atmosphere shall be performed during the test runs by use of the USEPA Method 9 Procedure (40 CFR 60, Appendix A, Method 9, 42 Fed. Reg. 41754 (August 18, 1977)).
- iii) Number of Test Runs: The average of six complete sampling runs during normal operating conditions will be the minimum required to determine compliance with this subsection (a).
- iv) Sampled Emission: During the test period, particulate emissions from the casting operation shall be directed into the cast house to the extent feasible and shall not create an unsafe or hazardous condition. Those emissions in and/or directed to the cast house shall be allowed to escape only at sampling area locations. Compliance with this requirement shall be determined by an agency-certified observer, and any significant visible emission from the cast house

any place other than a sampling location will invalidate the test.

- v) Sampler Locations: Samplers shall be located as close as practicable to the discharge point of the cast house emissions to the atmosphere and shall be oriented in the direction of the air flow. The sampler grid pattern shall be divided up such that the cross sectional area per sampler shall not exceed 9.29 square meters (100 square feet). If necessary to insure representative samples, the Agency may specify an area of less than 9.29 square meters (100 square feet). Each sampler shall be located at the approximate center of each sampling area. The concentration of particulate matter as determined by each sampler shall be considered as the concentration for each respective area.
- vi) Velocity Measurement Locations: Velocity measurements shall be made as close as possible to each sampling point location without interfering with the measurement. The average velocity measured at each sampling point for the entire sample run shall be used as the average velocity for each entire sampler area respectively.
- vii) Temperature Measurement Locations: The same as velocity measurement locations.
- viii) Emission Exhaust Pressure Measurements: This pressure shall be considered the barometric pressure as measured at the cast house floor.
- ix) Recording of Operating Parameters: The following information shall be recorded for those casts tested: material charge weights to the blast furnace for the operating turn during which cast house tests are performed; cast weights, total weight of iron plus slag entering the cast house during each casting operation sampled; all information contained in blast furnace casting logs or other similar

records, size of the tap hole drill bit used for each cast and the length of the tap hole for each previous cast.

- D) Calculations. Mass Emission Rate (lbs/hr): The mass emission rate (lbs/hr) for each test run shall consist of the sum of the mass emissions as determined per each sample area. Should the sample time duration be greater than one hour, the ratio calculated for one hour divided by the sample time duration (hours) shall be multiplied by the sum of the mass emissions to obtain the pounds per hour rate.

- b) Provided, however, that subsection (a) above shall not apply at the option of the operator if the operator has installed and is operating and maintaining collection equipment designed to collect a minimum of fifty percent (50%) of particulate matter emissions from the tap hole, the trough to the skimmers and the iron spouts. Such emissions shall be evacuated to pollution control equipment. Emissions from said pollution control equipment shall not exceed 46 mg/dscm (0.02 gr/dscf).

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

Section 212.446 Basic Oxygen Furnaces

Emissions of particulate matter from basic oxygen processes shall be controlled as follows:

- a) Charging, Refining and Tapping. Particulate matter emissions from all basic oxygen furnaces (BOF) shall be collected and ducted to pollution control equipment. Emissions from basic oxygen furnace operations during the entire cycle (operations from the beginning of the charging process through the end of the tapping process) shall not exceed the allowable emission rate specified by Section 212.321 for new emission sources or Section 212.322 for existing emission sources, whichever is applicable. For purposes of computing the process weight rate for this subsection, nongaseous material charged to the furnace and process oxygen shall be included. No material shall be included more than once.

- b) Hot Metal Transfer, Hot Metal Desulfurization and Ladle Lancing:

- 1) Particulate matter emissions from hot metal transfers to a mixer or ladle, hot metal desulfurization operations and ladle lancing shall be collected and ducted to pollution control equipment, and emissions from the pollution control equipment shall not exceed 69 mg/dscm (0.03 gr/dscf).

- 2) Provided, however, that if the owner or operator can establish that the total particulate matter emissions from hot

metal transfers, hot metal desulfurization operations and ladle lancing operations combined do not exceed the allowable emissions as specified by Section 212.321 for new emission sources or Section 212.322 for existing emission sources, whichever is applicable, where the process weight rate (P) is the hot metal charged to the BOF vessel, then subsection (b)(1) above shall not apply.

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

Section 212.447 Hot Metal Desulfurization Not Located in the BOF

The particulate matter emissions from hot metal desulfurization shall be collected and ducted to pollution control equipment, and emissions from the pollution control equipment shall not exceed 69 mg/dscm (0.03 gr/dscf).

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

Section 212.448 Electric Arc Furnaces

The total particulate emissions from meltdown and refining, charging, tapping, slagging, electrode port leakage and ladle lancing shall not exceed the allowable emission rate specified by Section 212.321 or 212.322, whichever is applicable.

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

Section 212.449 Argon-Oxygen Decarburization Vessels

The total particulate emissions from all charging, refining, alloy addition and tapping operations shall not exceed the allowable emission rate specified by Section 212.321 for new emission sources or Section 212.322 for existing emission sources, whichever is applicable.

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

Section 212.450 Liquid Steel Charging

Particulate matter emissions from liquid steel charging in continuous casting operations shall be controlled by chemical or mechanical shrouds or methods of comparable effectiveness.

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

Section 212.451 Hot Scarfing Machines

All hot scarfing machines shall be controlled by pollution control equipment. Emissions from said pollution control equipment shall not exceed 69 mg/dscm (0.03 gr/dscf) during hot

scarfing operations. Provided, however, that the hot scarfing machine existing on January 1, 1987 and operated by the LTV Steel Company, Inc., at its Chicago Works, which employs wet scrubbers, may emit particulate matter in amounts not exceeding 138 mg/dscm (0.06 gr/dscf) during hot scarfing operations so long as emissions do not exceed 23 mg/dscm (0.01 gr/dscf) as an hourly average, as measured per hour.

(Source: Amended in R84-48 at 11 Ill. Reg. 691, effective December 18, 1986)

Section 212.452 Measurement Methods

Particulate matter emissions from emission sources subject to Sections 212.441 through 212.451 shall be determined in accordance with procedures published in 40 CFR 60, Appendix A, Methods 1-5, from one-half of the sampling train. 42 Fed. Reg. 41754, et seq. (August 18, 1977). Visible emission evaluation for determining compliance shall be conducted in accordance with procedures published in 40 CFR 60, Appendix A, Method 9. 42 Fed. Reg. 41754, et seq. (August 18, 1977).

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

Section 212.455 Highlines on Steel Mills

Section 212.308 shall not apply to highlines at steel mills.

(Source: Amended at 3 Ill. Reg. 100, effective October 26, 1979)

Section 212.456 Certain Small Foundries

Sections 212.321 and 212.322 shall not apply to foundry cupolas if all the following conditions are met:

- a) The cupola was in existence prior to April 15, 1967; and
- b) The cupola process weight rate is less than or equal to 20,000 lb/hr; and,
- c) The cupola as of April 14, 1972, either:
 - 1) Is in compliance with subsection (c)(3); or,
 - 2) Is in compliance with the terms and conditions of a variance granted by the Board, and construction has commenced on equipment or modifications sufficient to achieve compliance with subsection (c)(3).
 - 3) Allowable emissions from small foundries covered by Section 212.456:

Allowable Process Weight Rate Pounds Per Hour	Emission Rate Pounds Per Hour
1,000	3.05
2,000	4.70
3,000	6.35
4,000	8.00
5,000	9.58
6,000	11.30
7,000	12.90
8,000	14.30
9,000	15.50
10,000	16.65
12,000	18.70
16,000	21.60
18,000	23.40
20,000	25.10

(Board Note: For process weight rates not listed, straight line interpolation between two consecutive process weight rates shall be used to determine allowable emission rates.)

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

Section 212.457 Certain Small Iron-Melting Air Furnaces

Section 212.322 shall not apply to iron-melting air furnaces if all the following conditions are met:

- a) The air furnace was in existence prior to April 15, 1967, and is located in Waukegan, Vermilion County, Illinois; and,
- b) The air furnace process weight rate is less than or equal to 5,000 lb/hr; and,
- c) The air furnace as of November 23, 1977, either:
 - 1) Is in compliance with subsection (c)(3); or
 - 2) Is in compliance with the terms and conditions of a variance granted by the Board; and construction has commenced on equipment or modifications sufficient to achieve compliance with subsection (c)(3).
 - 3) Allowable emissions from small iron-melting air furnaces covered by Section 212.457:

Allowable Process Weight Rate Pounds Per Hour	Emission Rate Pounds Per Hour
1,000	6.10
2,000	9.40
3,000	12.70
4,000	16.00
5,000	19.16

(Board Note: The average emission rate is computed by dividing the sum of the emissions during operation by the number of hours of operation, excluding any time during which the equipment is idle. For process weight rates not listed, straight line interpolation between two consecutive process weight rates shall be used to determine allowable average emission rates.)

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

SUBPART 5: AGRICULTURE

Section 212.461 Grain-Handling and Drying in General

- a) Sections 212.302, 212.321 and 212.322 shall not apply to grain-handling and grain-drying operations, portable grain-handling facilities and one-turn storage space.
- b) Housekeeping Practices. All grain-handling and grain-drying operations, regardless of size, must implement and use the following housekeeping practices:
 - 1) Air pollution control devices shall be checked daily and cleaned as necessary to insure proper operation.
 - 2) Cleaning and Maintenance.
 - A) Floors shall be kept swept and cleaned from boot pit to cupola floor. Roof or bin decks and other exposed flat surfaces shall be kept clean of grain and dust that would tend to rot or become airborne.
 - B) Cleaning shall be handled in such a manner as not to permit dust to escape to the atmosphere.
 - C) The yard and surrounding open area, including but not limited to ditches and curbs, shall be cleaned to prevent the accumulation of rotting grain.
 - 3) Dump Pit.
 - A) Aspiration equipment shall be maintained and operated.
 - B) Dust control devices shall be maintained and operated.
 - 4) Head House. The head house shall be maintained in such a fashion that visible quantities of dust or dirt are not allowed to escape to the atmosphere.
 - 5) Property. The yard and driveway of any facility shall be asphalted, oiled or equivalently treated to control dust.

6) Housekeeping Check List. Housekeeping check lists to be developed by the Agency shall be completed by the manager and maintained on the premises for inspection by Agency personnel.

c) Exemptions. Any existing grain-handling operation having a grain through-put of not more than 2 million bushels per year and located inside a major population area and any existing grain-handling operation or existing grain-drying operation located outside of a major population area which is required to apply for a permit pursuant to Sections 212.462 and 212.463, respectively, shall receive such permit notwithstanding the control requirements of those respective rules provided said operation can demonstrate that the following conditions exist upon application for, or renewal of, an operating permit:

- 1) The requirements of subsection (b) are being met; and
- 2) No certified investigation is on file with the Agency indicating that there is an alleged violation prior to issuance of the permit.

A) If a certified investigation is on file with the Agency indicating an alleged violation, any applicant may obtain an exemption for certain operations if said applicant can prove to the Agency that those parts of his operation for which he seeks exemption are not the probable cause of the alleged violation.

B) Applicants requesting an exemption in accordance with the provisions of subsection (c) may be granted an operating permit for a limited time, not to exceed 12 months in duration, if an objection is on file with the Agency on which a certified investigation has not been made prior to issuance of the permit.

C) An applicant may consider denial of an exemption under this rule as a refusal by the Agency to issue a permit. This shall entitle the applicant to appeal the Agency's decision to the Board pursuant to Section 40 of the Act (Ill. Rev. Stat. 1981, ch. 111 1/2, par. 1040).

d) Loss of Exemption. Any existing grain-handling operation or existing grain-drying operation that has received an operating permit pursuant to the provisions of subsection (c) above shall apply for an operating and/or construction permit pursuant to 35 Ill. Adm. Code 201 within 60 days after receipt of written notice from the Agency that a certified investigation is on file with the Agency indicating that there is an alleged violation against the operation. The

construction permit application shall include a compliance plan and project completion schedule showing the grain-handling operation's or grain-drying operation's program for complying with the standards and limitations of Section 212.462 or 212.463 as the case may be, within a reasonable time after the date on which notice of a certified investigation indicating alleged pollution was received by said operation; provided, however, any such operation shall not be required to reduce emissions from those parts of the operation that the applicant can prove to the Agency are not the probable cause of the pollution alleged in the certified investigation.

- 1) The written notice of loss of exemption is not a final action of the Agency appealable to the Board.
- 2) Denial of a permit requested pursuant to subsection (d) is a final action appealable to the Board under Section 40 of the Act (Ill. Rev. Stat. 1981, ch. III 1/2, par. 1040).
- e) Circumvention. It shall be a violation of this regulation for any person or persons to attempt to circumvent the requirements of this regulation by establishing a pattern of ownership or facility development which, except for such pattern of ownership or facility development, would otherwise require application of Section 212.462 or 212.463.
- f) Standard on Appeal to Board. In ruling on any appeal of a permit denial under subsection (c) or (d) above, the Board shall not order the permit to be issued by the Agency unless the applicant who has appealed the permit denial has proved to the Board that the grain-handling operation or grain-drying operation which is the subject of the denied application is not injurious to human, plant or animal life, to health, or to property, and does not unreasonably interfere with the enjoyment of life or property.

g) Alternate Control of Particulate Emissions.

- 1) Grain-handling or grain-drying operations, which were in numerical compliance with Section 212.322, as of April 14, 1972, and continue to be in compliance with Section 212.322 need not comply with the provisions under this Subpart, except the housekeeping practices in subsection (b) and this subsection (g).
- 2) Grain-handling or grain-drying operations, which were not in numerical compliance with Section 212.322, as of April 14, 1972, but which came into compliance with Section 212.321 prior to April 14, 1972, and continue to be in compliance with Section 212.321 need not comply with the provisions under this Subpart, except the housekeeping practices in subsection (b) and this subsection (g).

3) Proof of compliance with said rule shall be made by stack sampling and/or material balance results obtained from actual testing of the subject facility or process and be submitted at the time of an application for, or renewal of, an operating permit.

h) Severability. If any provision of these rules and regulations is adjudged invalid, such invalidity shall not affect the validity of this 35 Ill. Adm. Code: Subtitle B, Chapter I (Chapter) as a whole or of any Part, Subpart, sentence or clause thereof not adjudged invalid.

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

Section 212.462 Grain Handling Operations

Unless otherwise exempted pursuant to Section 212.461(c) or (d), or allowed to use alternate control according to Section 212.461(g), existing grain-handling operations with a total annual grain through-put of 100,000 bushels or more shall apply for an operating permit pursuant to 35 Ill. Adm. Code 201, and shall demonstrate compliance with the following:

a) Cleaning and Separating Operations.

- 1) Particulate matter generated during cleaning and separating operations shall be captured to the extent necessary to prevent visible particulate matter emissions directly into the atmosphere.
- 2) For grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90% by weight prior to release into the atmosphere.
- 3) For grain-handling facilities having a grain through-put exceeding 2 million bushels per year and located within a major population area, air contaminants collected from cleaning and separating operations shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 98% by weight prior to release into the atmosphere.

b) Major Dump-Pit Area.

1) Induced Draft.

- A) Induced draft shall be applied to major dump pits and their associated equipment (including, but not limited to, boots, hoppers and legs) to such an extent that a minimum face velocity is maintained at the

effective grate surface, sufficient to contain particulate emissions generated in unloading operations. The minimum face velocity at the effective grate surface shall be at least 200 fpm, which shall be determined by using the equation:

$$V = Q/A$$

where:

V = face velocity; and
Q = induced draft volume in scfm; and
A = effective grate area in square feet; and

- B) The induced draft air stream for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 90% by weight; and

- C) The induced draft air stream for grain-handling facilities having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be confined and conveyed through air pollution control equipment which has an overall rated and actual particulate collection efficiency of not less than 98% by weight; and

- D) Means or devices (including, but not limited to, quick-closing doors, air curtains or wind deflectors) shall be employed to prevent a wind velocity in excess of 50% of the induced draft face velocity at the pit; provided, however, that such means or devices do not have to achieve the same degree of prevention when the ambient air wind exceeds 25 mph. The wind velocity shall be measured, with the induced draft system not operating, at a point midway between the dump-pit area walls at the point where the wind exits the dump-pit area, and at a height above the dump-pit area floor of approximately 2 feet; or

- 2) Any equivalent method, technique, system or combination thereof adequate to achieve, at a minimum, a particulate matter emission reduction equal to the reduction which could be achieved by compliance with subsection (b)(1).

C) Internal Transferring Area.

- 1) Internal transferring area shall be enclosed to the extent necessary to prohibit visible particulate matter emissions directly into the atmosphere.

- 2) Air contaminants collected from internal transfer operations for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 90% by weight prior to release into the atmosphere.

- 3) Air contaminants collected from internal transfer operations for grain-handling facilities having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be conveyed through air pollution control equipment which has a rated and actual particulate removal efficiency of not less than 98% by weight prior to release into the atmosphere.

D) Load-Out Area.

- 1) Truck and hopper car loading shall employ socks, sleeves or equivalent devices which extend 6 inches below the sides of the receiving vehicle, except for topping off. Choke loading shall be considered an equivalent method as long as the discharge is no more than 12 inches above the sides of the receiving vehicle.

- 2) Box car loading shall employ means or devices to prevent the emission of particulate matter into the atmosphere to the fullest extent which is technologically and economically feasible.

3) Watercraft Loading.

- A) Particulate matter emissions generated during loading for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be captured in an induced draft air stream, which shall be ducted through air pollution control equipment that has a rated and actual particulate matter removal efficiency of not less than 90% by weight prior to release into the atmosphere.

- B) Particulate matter emissions generated during loading for grain-handling facilities having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be captured in an induced draft air stream, which shall be ducted through air pollution control equipment that has a rated and actual particulate matter removal efficiency of not less than 98% by weight prior to release into the atmosphere; except for the portion of grain loaded by trimming machines for which particulate matter emission reductions, at a minimum, shall equal the reduction achieved by compliance with subsection (d)(3)(A).

e) New and Modified Grain-Handling Operations. New and modified grain-handling operations shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code 201, and shall comply with the control equipment requirements of this Section, except for new and modified grain-handling operations which will handle an annual grain through-put of less than 300,000 bushels; provided, however, that for the purpose of this Subpart, an increase in the annual grain through-put, without physical alterations or additions to the grain-handling operation, shall not be considered a modification unless such increase exceeds 30% of the annual grain through-put on which the operation's original construction and/or operating permit was granted. If the grain-handling operation has been operating lawfully without a permit, its annual grain through-put shall be determined as set forth in the definition of the term "annual grain through-put."

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

Section 212.463 Grain Drying Operations

Unless otherwise exempted pursuant to Section 212.461(c) or (d) or allowed to use alternate control according to Section 212.461(g), existing grain-drying operations with a total grain-drying capacity in excess of 750 bushels per hour for 5% moisture extraction at manufacturer's rated capacity (using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers) shall be operated in such a fashion as to preclude the emission of particulate matter larger than 300 microns mean particle diameter, shall apply for an operating permit pursuant to 35 Ill. Adm. Code 201, and shall comply with the following:

- a) Column Dryers. The largest effective circular diameter of transverse perforations in the external sheeting of a column dryer shall not exceed 0.094 inch, and the grain inlet and outlet shall be enclosed.
- b) Rack Dryers. No portion of the exhaust air of rack-dryers shall be emitted to the ambient atmosphere without having passed through a particulate collection screen having a maximum opening of 50 mesh, U.S. Sieve Series.

- 1) All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put of not more than 2 million bushels per year or located outside a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90% by weight prior to release into the atmosphere.

- 2) All such screens will have adequate self-cleaning mechanisms, the exhaust gas of which for grain-handling facilities having a grain through-put exceeding 2 million bushels per year and located in a major population area shall be ducted through air pollution control equipment which has a rated and actual particulate removal efficiency of 90% by weight prior to release into the atmosphere.

- c) Other Types of Dryers. All other types of dryers shall be controlled in a manner which shall result in the same degree of control required for rack-dryers pursuant to subsection (b).

- d) New and Modified Grain-Drying Operations. New and modified grain-drying operations shall file applications for construction and operating permits pursuant to 35 Ill. Adm. Code 201, and shall comply with the control equipment requirements of this Section, except for new and modified grain-drying operations which do not result in a total grain-drying capacity in excess of 750 bushels per hour for 5% moisture extraction at manufacturer's rated capacity, using the American Society of Agricultural Engineers Standard 248.2, Section 9, Basis for Stating Drying Capacity of Batch and Continuous-Flow Grain Dryers.

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

SUBPART 7: CONSTRUCTION AND WOOD PRODUCTS

Section 212.681 Grinding; Woodworking; Sandblasting and Shotblasting

Sections 212.321 and 212.322 shall not apply to the following industries, which shall be subject to Subpart K of this Part:

- a) Grinding;
- b) Woodworking;
- c) Sandblasting or shotblasting.

(Source: Amended at 3 Ill. Reg. 184, effective September 28, 1979)

Appendix A Rule into Section Table

Rule	Section
202 Preamble.....	212.121
202(a)(1).....	212.122
202(a)(2).....	212.421
202(b).....	212.123
202(c).....	212.124
202(d).....	212.125
202(e).....	Appendix C
203(a).....	212.321.
	Illustration B
203(b).....	212.322.
	Illustration C

Rule	Section
203(c).....	Appendix C
203(d)(1).....	212.381
203(d)(2).....	212.422
203(d)(3) Preamble.....	212.361
203(d)(3)(A).....	Appendix C
203(d)(3)(B).....	212.361
	Appendix C
203(d)(4).....	212.681
203(d)(5) Preamble.....	212.441
203(d)(5)(A).....	212.442
203(d)(5)(B).....	212.443
203(d)(5)(C).....	212.444
203(d)(5)(D).....	212.445
203(d)(5)(E).....	212.446
203(d)(5)(F).....	212.447
203(d)(5)(G).....	212.448
203(d)(5)(H).....	212.449
203(d)(5)(I).....	212.450
203(d)(5)(J).....	212.451
203(d)(5)(K).....	212.452
203(d)(5)(L).....	Appendix C
203(d)(5)(M).....	Appendix C
203(d)(6).....	212.456
203(d)(7).....	212.323
203(d)(8) Preamble.....	212.461(a)
203(d)(8)(A).....	212.461(b)
203(d)(8)(B).....	212.462(a)-(d)
203(d)(8)(C).....	212.463(a)-(c)
203(d)(8)(D).....	212.461(c)
203(d)(8)(E).....	212.461(d)
203(d)(8)(F).....	212.462(e)
203(d)(8)(G).....	212.463(d)
203(d)(8)(H).....	212.461(e)
203(d)(8)(I).....	212.461(f)
203(d)(8)(J).....	Appendix C
203(d)(8)(K).....	212.461(g)
203(d)(8)(L).....	212.461(h)
203(d)(9).....	212.457
203(e)(1).....	212.181
203(e)(2).....	212.181
203(e)(3).....	212.181
203(e)(4) Preamble.....	212.181
203(e)(4)(A).....	212.182
203(e)(5).....	212.183
203(e)(6).....	212.184
203(f)(1).....	212.301
203(f)(2).....	212.302
203(f)(3) Preamble.....	Appendix C
203(f)(3)(A).....	212.304
203(f)(3)(B).....	212.305
203(f)(3)(C).....	212.306
203(f)(3)(D).....	212.307
203(f)(3)(E) First Paragraph.....	212.308
203(f)(3)(E) Exception.....	212.455
203(f)(3)(F) Preamble.....	212.309
	Appendix C
203(f)(3)(F) Second Paragraph.....	212.310
203(f)(3)(F) Last Paragraph.....	212.312
203(f)(4).....	212.313
203(f)(5).....	212.314
203(f)(6).....	212.315
203(g)(1)(A).....	212.201
203(g)(1)(B).....	212.202
	Illustration A
203(g)(1)(C).....	212.203
203(g)(1)(D).....	212.204
203(g)(1)(E).....	212.205
203(g)(2).....	212.206
203(g)(3).....	212.207

Rule	Section
203(g)(4).....	212.208
203(h).....	212.110
203(i).....	Appendix C

Appendix B
Section into Rule Table

Section	Rule
212.100.....	Added in Codification
212.110.....	203(h)
212.111.....	Added in Codification
212.112.....	Added in Codification
212.113.....	Added in Codification
212.121.....	202 Preamble
212.122.....	202(a)(1)
212.123.....	202(b)
212.124.....	202(c)
212.125.....	202(d)
212.181.....	203(e)(1)-(3), 203(e)(4), Preamble
212.182.....	203(e)(4)(A)
212.183.....	203(e)(5)
212.184.....	203(e)(6)
212.201.....	203(g)(1)(A)
212.202.....	203(g)(1)(B)
212.203.....	203(g)(1)(C)
212.204.....	203(g)(1)(D)
212.205.....	203(g)(1)(E)
212.206.....	203(g)(2)
212.207.....	203(g)(3)
212.208.....	203(g)(4)
212.301.....	203(f)(1)
212.302.....	203(f)(2)
212.304.....	203(f)(3)(A)
212.305.....	203(f)(3)(B)
212.306.....	203(f)(3)(C)
212.307.....	203(f)(3)(D)
212.308.....	203(f)(3)(E)
	First Paragraph
212.309.....	203(f)(3)(F)
	Preamble
212.310.....	203(f)(3)(F)
	Second Paragraph
212.312.....	203(f)(3)(F)
	Last Paragraph
212.313.....	203(f)(4)
212.314.....	203(f)(5)
212.315.....	203(f)(6)
212.321.....	203(a)
212.322.....	203(b)
212.323.....	203(d)(7)
212.361.....	203(d)(3)
	Preamble
	203(d)(3)(B)
212.381.....	203(d)(1)
212.421.....	202(a)(2)
212.422.....	203(d)(2)
212.441.....	203(d)(5)
	Preamble
212.442.....	203(d)(5)(A)

Section	Rule
212.443.....	203(d)(5)(B)
212.444.....	203(d)(5)(C)
212.445.....	203(d)(5)(D)
212.446.....	203(d)(5)(E)
212.447.....	203(d)(5)(F)
212.448.....	203(d)(5)(G)
212.449.....	203(d)(5)(H)
212.450.....	203(d)(5)(I)
212.451.....	203(d)(5)(J)
212.452.....	203(d)(5)(K)
212.455.....	203(f)(3)(E)
	Exception
212.456.....	203(d)(6)
212.457.....	203(d)(9)
212.461(a).....	203(d)(8)
	Preamble
212.461(b).....	203(d)(8)(A)
212.461(c).....	203(d)(8)(D)
212.461(d).....	203(d)(8)(E)
212.461(e).....	203(d)(8)(H)
212.461(f).....	203(d)(8)(I)
212.461(g).....	203(d)(8)(K)
212.461(h).....	203(d)(8)(L)
212.462(a)-(d).....	203(d)(8)(B)
212.462(e).....	203(d)(8)(F)
212.463(a)-(c).....	203(d)(8)(C)
212.463(d).....	203(d)(8)(G)
212.681.....	203(d)(4)
Appendix A.....	Added in
	Codification
Appendix B.....	Added in
	Codification
Appendix C.....	202(e),
	203(c),
	203(d)(3)(A)
	& (B),
	203(d)(5)(L)
	& (M),
	203(d)(8)(J),
	203(f)(3)
	Preamble,
	203(f)(3)(F)
	Preamble,
	203(i)
Illustration A.....	203(g)(1)(B)
Illustration B.....	203(a)
Illustration C.....	203(b)

Appendix C Past Compliance Dates

Rule 202(e)

Owners or operators of new emission sources were required to comply with the emission standards and limitations of Rule 202 by April 14, 1972.

Owners or operators of existing emission sources were required to comply with the emission standards and limitations of Rule 202 by December 31, 1972; except that owners or operators of emission sources subject to Rule 203(g) were required to comply with the emission standards and limitations of Rule 202 by May 10, 1975.

Rule 203(c)

Except as otherwise provided in Rule 203, every existing process emission source which was not

in compliance with Rule 203(b) as of April 14, 1972, was required to comply with Rule 203(a), unless both of the following conditions were met:

- The source was in compliance, as of April 14, 1972, with the terms and conditions of a variance granted by the Board, or, by June 13, 1972, the source was the subject of a variance petition filed with the Board, which variance was subsequently granted; and,
- As of April 14, 1972, construction was commenced on equipment or modifications sufficient to achieve compliance with Rule 203(b).

Rule 203(d)(3)(A) and (B)

Corn wet milling processes subject to Rule 203(d)(3) were subject to a standard of 0.3 gr/scf of effluent gas from April 14, 1972 to May 10, 1975.

Rule 203(d)(5)(L) and (M)

Every owner or operator of an emission source the construction or modification of which was commenced after September 6, 1979, was required to comply with the emission standards and limitations of Rule 203(d)(5) upon commencement of operation.

Every owner or operator of an emission source the construction or operation of which was commenced prior to September 6, 1979, was required to comply with the emission standards and limitations of Rule 203(d)(5) no later than December 31, 1982.

From the effective date of this Rule 203(d)(5) through December 31, 1982, full compliance with an approved compliance program and project completion schedule pursuant to Rule 104 for all sources of particulate emissions subject to Rule 203(d)(5) and 203(f) as amended under common ownership or control in the same air quality control region constituted compliance with the emission standards and limitations contained in Part II if such compliance program and project completion schedule:

- Provided for compliance by all sources of particulate matter subject to Rule 203(d)(5) and 203(f), as amended, under common ownership or control in the same air quality region, as expeditiously as practicable, considering what was economically reasonable and technically feasible; and
- Provided for reasonable further progress in achieving the reductions in particulate emissions required by Rule 203(d)(5) and 203(f), as amended, including annual increments of reductions such that at least one-third of the total reductions were achieved by December 31, 1980 and at least two-thirds of the total reductions were achieved by December 31, 1981, unless the owner or operator demonstrated in a hearing before the Board that such increments were technically infeasible or economically unreasonable or unless the owner or operator demonstrated in a hearing before the Board

that some alternate schedule represents reasonable further progress within the meaning of Section 172(b) of the Clean Air Act, 42 U.S.C. Section 7502(b).

The provisions of Rule 203(d)(5)(L)(iii) did not apply to any facility subject to a rule which was not in full force and effect as a matter of state law because of judicial action, and in such event the facility shall remain subject to the regulations in effect at the time these amendments were adopted.

The provisions of Rule 203(d)(5)(L) were not severable. Should any portion thereof have been found invalid or been disapproved by USEPA as a revision of the State Implementation Plan pursuant to the Clean Air Act, then the entire Rule 203(d)(5)(L) would have been null and void; the provisions of Rule 203(d)(5)(A) and (B) were to have become immediately effective, and the provisions of existing Rule 203(a), (b) and (c) and prior Rule 203(d)(2) (in effect from April 14, 1972 to the effective date of this Rule) were to have been reinstated.

Rule 203(d)(8)(J)

Existing grain-handling and grain-drying operations subject to Rule 203(d)(8)(B), (C) and (D) were required to achieve compliance on or before April 30, 1977, except that all such operations were required to achieve compliance with Rule 203(d)(8)(A) by June 30, 1975.

New grain-handling and grain-drying operations were required to comply with Rule 203(d)(8) by June 30, 1975.

Rule 203(f)(3)(Preamble)

Potential sources of fugitive particulate matter were required to be maintained and operated in accordance with Rule 203(f)(3) on or after December 31, 1982.

Rule 203(f)(3)(F)(Preamble)

Sources of fugitive particulate matter described in Rule 203(f)(3)(A)-(E) were required to submit an operating program to the Agency for review by December 31, 1982.

Rule 203(1)

Every owner or operator of a new emission source was required to comply with the standards and limitations of Rule 203 by April 14, 1972.

Except as otherwise provided in Rule 203(d)(4), (d)(5), (i)(3), (i)(4) and (i)(5), every owner or operator of an existing emission source was required to comply with the standards and limitations of Rule 203 by December 31, 1973.

Every owner or operator of an existing emission source subject to Rule 203(f) was required to comply with the standards and limitations of Rule 203:

- a) by October 14, 1972 when the emissions from such source were caused by the stockpiling of materials;

- b) by October 14, 1972 for emission sources subject to Rule 203(f)(4); and

- c) by April 14, 1973 for all other emission sources subject to Rule 203(f).

Every owner or operator of an existing emission source subject to Rule 203(g) was required to comply with the standards and limitations of Rule 203 by May 30, 1975.

Notwithstanding any other provisions of Rule 203, every owner or operator of an existing emission source which:

- a) was required to comply with Rules 2-2.51, 2-2.52, 2-2.54, 3-3.111, 3-3.210, 3-3.213 and 3-3.229 of Rules and Regulations Governing the Control of Air Pollution as amended August 19, 1969; and

- b) which was in compliance with such rules, as of April 14, 1972, or is in compliance with Rule 203(c)(1) and (2);

was required to comply with the applicable emission standards and limitations of Rule 203 by May 30, 1975.

Notwithstanding the other dates specified in this rule, grain handling and conditioning operations were required to comply with the requirements of Rule 203 by May 30, 1975.

Illustration A
Allowable Emissions from Solid Fuel Combustion
Emission Sources Outside Chicago

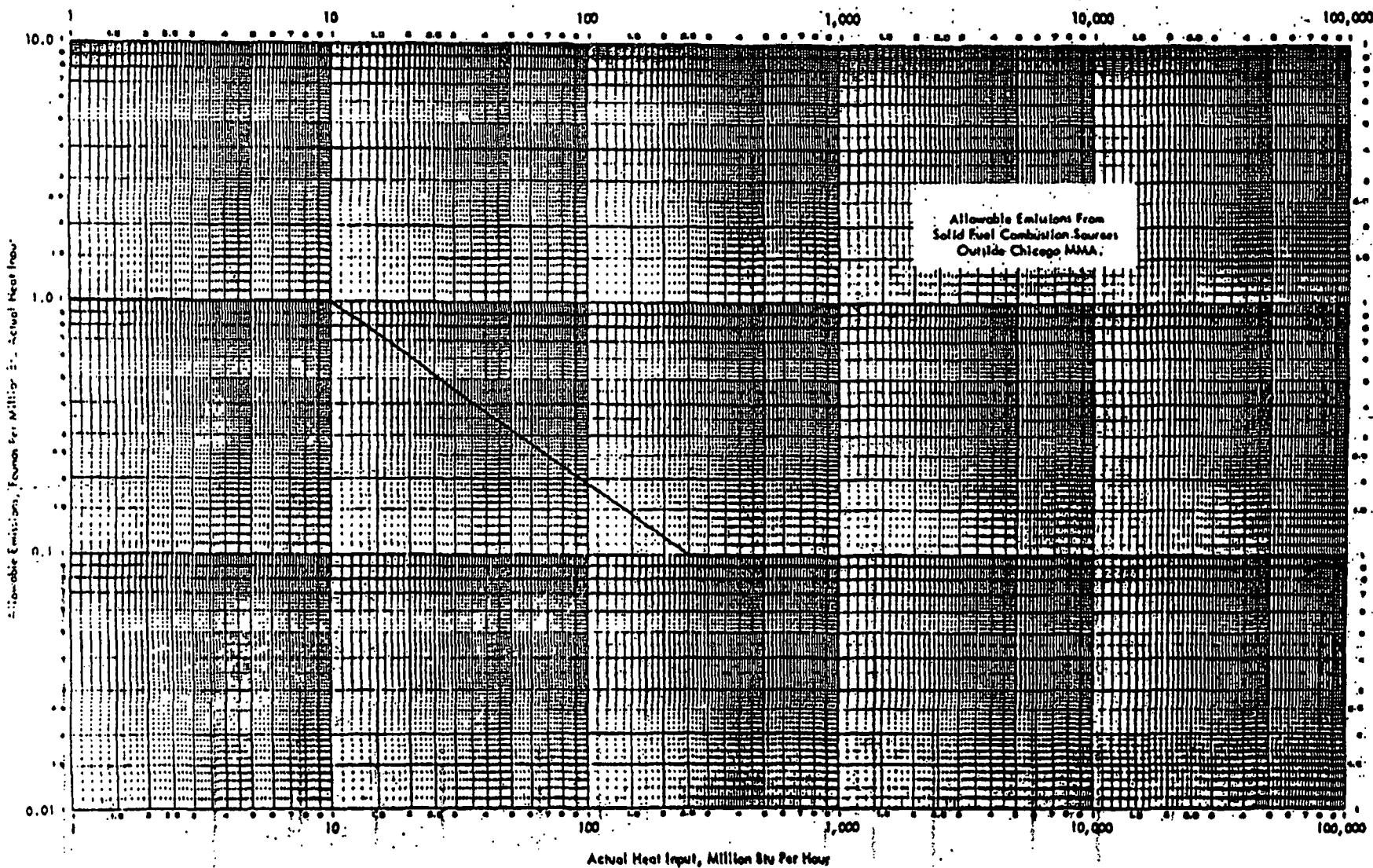
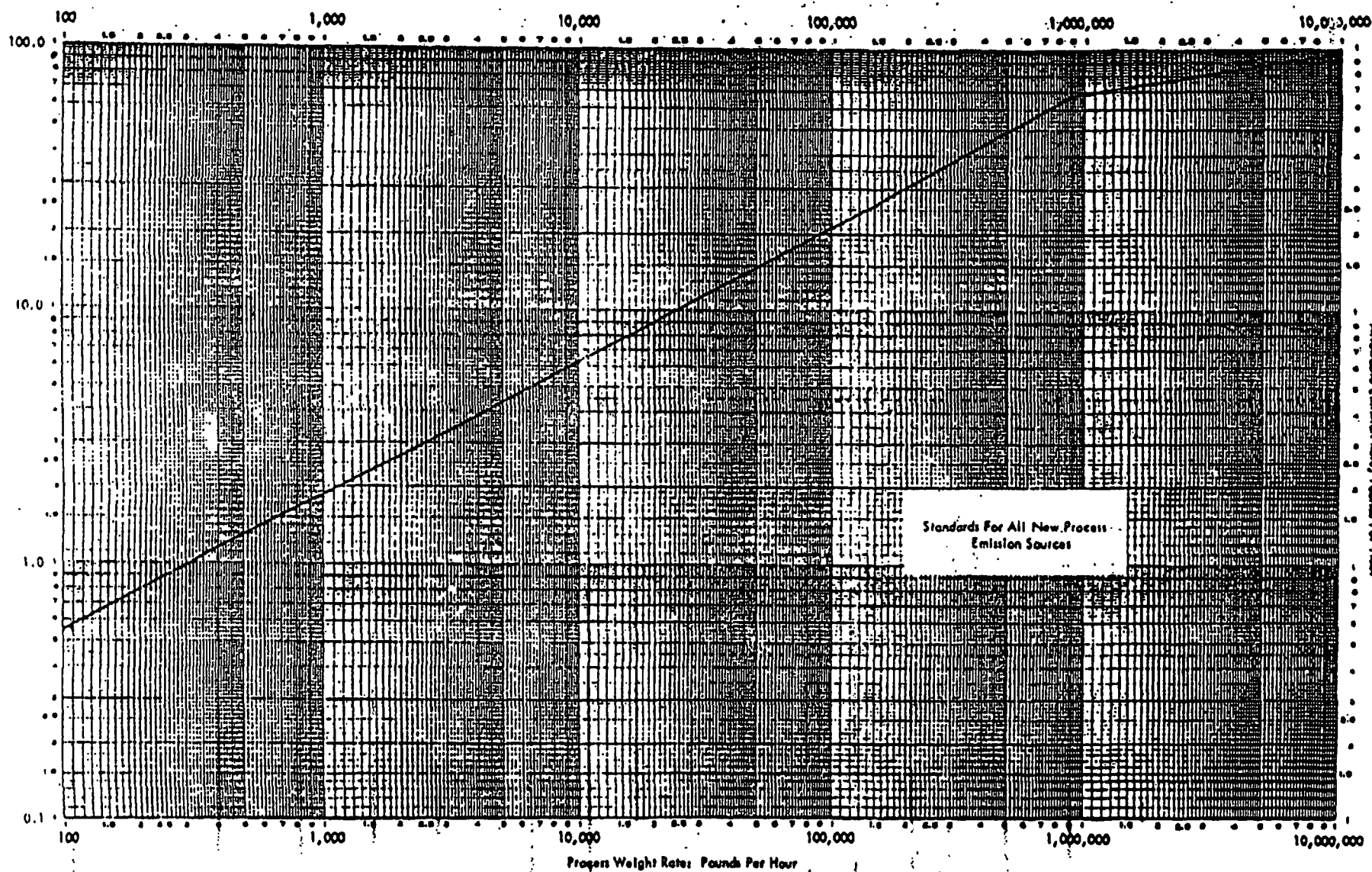


Illustration B
Limitations for all New Process Emission Sources
Attainable Emission Rate, Pounds Per Hour



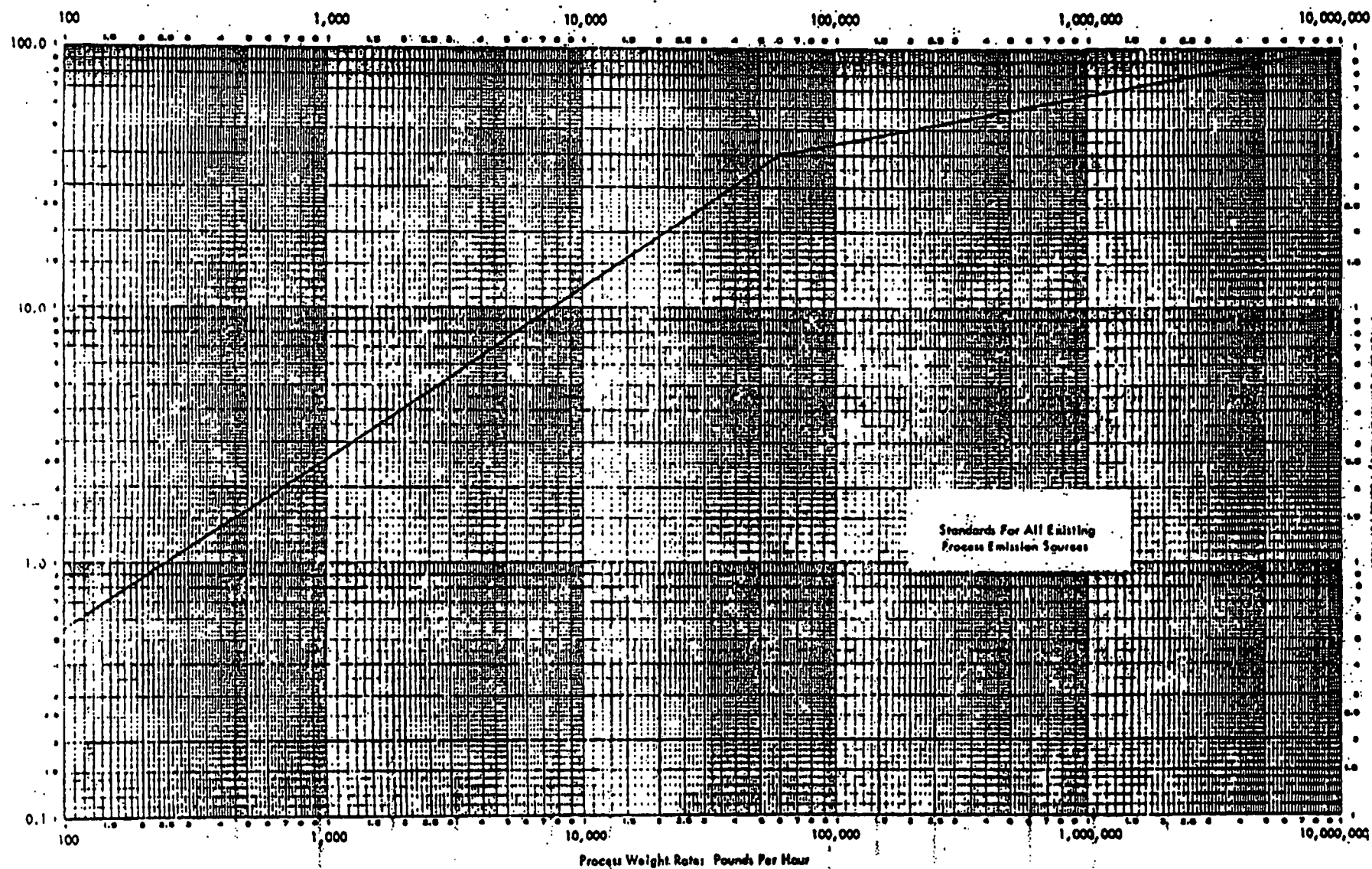


Illustration C
Limitations for all Existing Process Emission Sources
Allowable Emission Rate, Pounds Per Hour

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

CHAPTER I: POLLUTION CONTROL BOARD

**SUBCHAPTER C: EMISSION STANDARDS AND
LIMITATIONS FOR STATIONARY SOURCES**

**PART 214
SULFUR LIMITATIONS**

SUBPART A: GENERAL PROVISIONS

Section	Scope and Organization
214.100	Measurement Methods
214.101	Abbreviations and Units
214.102	Definitions
214.103	Incorporations by Reference

**SUBPART B: NEW FUEL COMBUSTION
EMISSION SOURCES**

Section	Scope
214.120	Large Sources
214.121	Small Sources

**SUBPART C: EXISTING SOLID FUEL
COMBUSTION EMISSION SOURCES**

Section	Scope
214.140	Sources Located in Metropolitan Areas
214.141	Small Sources Located Outside Metropolitan Areas
214.142	Large Sources Located Outside Metropolitan Areas

**SUBPART D: EXISTING LIQUID OR MIXED
FUEL COMBUSTION EMISSION SOURCES**

Section	Liquid Fuel Burned Exclusively
214.161	Combination of Fuels

**SUBPART E: AGGREGATION OF SOURCES
OUTSIDE METROPOLITAN AREAS**

Section	Dispersion Enhancement Techniques
214.181	Prohibition
214.182	General Formula
214.183	Special Formula
214.184	Alternative Emission Rate
214.185	New Operating Permits

**SUBPART F: ALTERNATIVE STANDARDS FOR
SOURCES INSIDE METROPOLITAN AREAS**

Section	Alternative Standards for Sources in Metropolitan Areas
214.201	Dispersion Enhancement Techniques

SUBPART K: PROCESS EMISSION SOURCES

Section	Scope
214.300	General Limitation
214.301	Exception for Air Pollution Control Equipment

214.303	Use of Sulfuric Acid
214.304	Fuel Burning Process Emission Source

**SUBPART O: PETROLEUM REFINING,
PETROCHEMICAL AND CHEMICAL MANUFACTURING**

Section	Scope
214.380	Sulfuric Acid Manufacturing
214.381	Petroleum and Petrochemical Processes
214.382	Chemical Manufacturing
214.383	Sulfate and Sulfite Manufacturing

**SUBPART P: STONE, CLAY, GLASS
AND CONCRETE PRODUCTS**

Section	Scope
214.400	Glass Melting and Heat-Treating
214.401	Lime Kilns

**SUBPART Q: PRIMARY AND SECONDARY
METAL MANUFACTURING**

Section	Scope
214.420	Combination of Fuels at Steel Mills in Metropolitan Areas
214.421	Secondary Lead Smelting in Metropolitan Areas
214.422	Slab Reheat Furnaces in St. Louis Area

SUBPART V: ELECTRIC POWER PLANTS

Section	Minnetka Power Plant

SUBPART X: UTILITIES

Section	Scope
214.560	E.D. Edwards Electric Generating Station
214.561	Coffeen Generating Station

Appendix A:	Rule into Section Table
Appendix B:	Section into Rule Table
Appendix C:	Method used to Determine Average Actual Stack Height and Effective Height of Effluent Release
Appendix D:	Past Compliance Dates

AUTHORITY: Implementing Section 10 and
authorized by Section 27 of the Environmental
Protection Act. (Ill. Rev. Stat. 1987, ch. 111
1/2, pars. 1010 and 1027).

SOURCE: Adopted as Chapter 2: Air Pollution,
Rule 204: Sulfur Emission Standards and
Limitations, R71-23, 4 PCB 191, filed and
effective April 14, 1972; amended in R74-2 and
R75-5, 32 PCB 295, at 3 Ill. Reg. 5, p. 777,
effective February 3, 1979; amended in R74-2 and
R75-5, 38 PCB 129, at 4 Ill. Reg. 28, p. 417,
effective June 26, 1980; amended in R78-17, 40
PCB 291, at 5 Ill. Reg. 1892, effective February
17, 1981; amended in R77-15, 44 PCB 267, at 6
Ill. Reg. 2146, effective January 28, 1982;
amended and renumbered in R80-22, at 7 Ill. Reg.
4219, effective March 28, 1983; codified at 7
Ill. Reg. 13597; amended in R80-22(8), at 8 Ill.

Reg. 6172, effective April 24, 1984; amended in R84-28, at 10 III. Reg. 9806, effective May 20, 1986; amended in R86-31 at 12 III. Reg. 17387, effective October 14, 1988; amended in R86-30 at 12 III. Reg. 20778, effective December 5, 1988.

SUBPART A: GENERAL PROVISIONS

Section 214.100 Scope and Organization

- a) This Part sets standards and limitations for emission of sulfur from stationary sources.
- b) Permits for sources subject to this Part may be required pursuant to 35 III. Adm. Code 201.
- c) Notwithstanding the provisions of this Part, the air quality standards contained in 35 III. Adm. Code 243 may not be violated.
- d) This Part is divided into Subparts which are grouped as follows:
 - 1) Subpart A: General provisions;
 - 2) Subparts B-J: Fuel combustion emission sources and incinerators;
 - 3) Subparts K-M: Process emission sources;
 - 4) Subparts N-End: Industry and site specific rules.
- e) These rules have been grouped for the convenience of the public; the scope of each is determined by its language and history.

(Source: Added and codified at 7 III. Reg. 13597.)

Section 214.101 Measurement Methods

- a) Sulfur Dioxide Measurement. Measurement of sulfur dioxide emissions from stationary sources shall be made according to the procedure published in 40 CFR 60, Appendix A, Method 6 (1982), or by measurement procedures specified by the Illinois Environmental Protection Agency (Agency) according to the provisions of 35 III. Adm. Code 201.
- b) Sulfuric Acid Mist and Sulfur Trioxide Measurement. Measurement of sulfuric acid mist and sulfur trioxide shall be according to the barium-thorin titration method as published in 40 CFR 60, Appendix A, Method 8 (1982).
- c) Solid Fuel Averaging Measurement. If low sulfur solid fuel is used to comply with Sections 214.121, 214.122, 214.141, 214.142, 214.162 and 214.421, the applicable solid fuel sulfur dioxide standard shall be met by a two month average of daily samples with 95 percent of the samples being no greater than 20 percent above the average. A.S.T.M. procedures shall be used for solid fuel sampling, sulfur and for heating value determinations.

- d) Hydrogen Sulfide Measurement. For purposes of determining compliance with Section 214.382(c), the concentration of hydrogen sulfide in petroleum refinery fuel gas shall be measured using the Tutwiler Procedure specified in 40 CFR 60.648 (1986).

(Source: Amended at 12 III. Reg. 20778, effective December 5, 1988)

Section 214.102 Abbreviations and Units

- a) The following abbreviations are used in this Part:

btu	British thermal units (68°F)
ft	foot
gr	grains
J	Joule
kg	kilogram
kg/MW-hr	kilograms per megawatt-hour
km	kilometer
lbs	pounds
lbs/MMBtu	pounds per million btu
m	meter
mg	milligram
Mg	megagram, metric ton or tonne
mi	mile
MMBtu	million British thermal units
MMBtu/hr	million British thermal units per hour
MW	megawatt, one million watts
MW-hr	megawatt-hour
ng	nanogram, one billionth of a gram by volume
ng/J	nanograms per Joule
ppm	parts per million
scf	standard cubic foot
scm	standard cubic meter
T	English ton

- b) The following conversion factors have been used in this Part:

English	Metric
2,205 lb	1 kg
1 T	0.907 Mg
1 lb/T	0.500 kg/Mg
MMBtu/hr	0.293 MW
1 lb/MMBtu	1.548 kg/MW-hr
1 mi	1.61 km
1 gr/scf	2289 mg/scm

(Source: Amended at 12 III. Reg. 20778, effective December 5, 1988)

Section 214.103 Definitions

The definitions of 35 III. Adm. Code 201 and 211 apply to this Part.

(Source: Added and codified at 7 III. Reg. 13597.)

Section 214.104 Incorporations by Reference

The following materials are incorporated by reference. These incorporations do not include any later amendments or editions.

a) 40 CFR 60, Appendix A (1982):

- 1) Method 6: method for measurement of sulfur dioxide emissions;
 - 2) Method 8: barium-thorin titration method.
- b) American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103:
- 1) For solid fuel sampling:
ASTM D-2234 (1976)
ASTM D-2622 (1976)
 - 2) For sulfur determinations:
ASTM D-3177 (1976)
ASTM D-2013 (1982)
 - 3) For heating value determinations:
ASTM D-2015 (1976)
ASTM D-3286 (1976)
- c) Tutwiler Procedure for hydrogen sulfide, 40 CFR 60.648 (1986).

(Source: Amended at 12 Ill. Reg. 20778, effective December 5, 1988)

SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES

Section 214.120 Scope

Subparts B through F contain general rules for sulfur emissions from fuel combustion emission sources. These may be modified by industry and site specific rules in Subparts M et seq.

(Source: Added and codified at 7 Ill. Reg. 13597)

Section 214.121 Large Sources.

This Section applies to new fuel combustion emission sources with actual heat input greater than 73.2 MW (250 mmbtu/hr).

- a) Solid Fuel Burned Exclusively. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion emission source greater than 73.2 MW (250 mmbtu/hr), burning solid fuel exclusively, to exceed 1.86 kg of sulfur dioxide per MW-hr of actual heat input (1.2 lbs/mmbtu).

(Board Note: This section was invalidated in Commonwealth Edison v. PCB, 25 Ill. App.3d 271, 62 Ill.2d 494, 43 N.E.2d 459, 323 N.E.2d 84, Ashland Chemical Corp. v. PCB, 64 Ill. App.3d 169, and Illinois State Chamber of Commerce v. PCB, 67 Ill. App.3d 839, 384 N.E.2d 922, 78 Ill.2d 1, 398 N.E.2d 9.)

- b) Liquid Fuel Burned Exclusively. No person shall cause or allow the emission of sulfur

dioxide into the atmosphere in any one hour period from any new fuel combustion emission source greater than 73.2 MW (250 mmbtu/hr), burning liquid fuel exclusively:

- 1) To exceed 1.2 kg of sulfur dioxide per MW-hr of actual heat input when residual fuel oil is burned (0.8 lbs/mmbtu); and
- 2) To exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmbtu).

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.122 Small Sources

This Section applies to new fuel combustion emission sources with actual heat input smaller than, or equal to, 73.2 MW (250 mmbtu/hr).

- a) Solid Fuel Burned Exclusively. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmbtu/hr), burning solid fuel exclusively, to exceed 2.79 kg of sulfur dioxide per MW-hr of actual heat input (1.8 lbs/mmbtu).
- b) Liquid Fuel Burned Exclusively. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmbtu/hr), burning liquid fuel exclusively:

- 1) To exceed 1.55 kg of sulfur dioxide per MW-hr of actual heat input when residual fuel oil is burned (1.0 lbs/mmbtu); and
- 2) To exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmbtu).

(Source: Amended at 4 Ill. Reg. 28, p. 417, effective June 26, 1980)

SUBPART C: EXISTING SOLID FUEL COMBUSTION EMISSION SOURCES

Section 214.140 Scope

This Subpart contains rules which establish general sulfur emissions standards for existing solid fuel emission sources. These may be modified by industry and site-specific rules in Subparts M et seq.

(Source: Added at 10 Ill. Reg. 9806, effective May 20, 1986).

Section 214.141 Sources Located in Metropolitan Areas

Except as otherwise provided in this Part and in Subpart V of this Part, no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any existing fuel combustion source, burning solid fuel exclusively, located in the Chicago, St. Louis (Illinois) or Peoria major metropolitan areas, to exceed 1.8 pounds of sulfur dioxide per mmbtu of actual heat input (774 nanograms per joule).

a) Sources located in Kankakee or McHenry Counties shall not exceed 6.8 pounds of sulfur dioxide per mmbtu of actual heat input (2,924 nanograms per joule) in any one hour period.

b) Existing industrial sources, not equipped with flue gas desulfurization systems as of December 1, 1980, located in the Peoria major metropolitan area, shall not exceed 5.5 pounds of sulfur dioxide per mmbtu of actual heat input (2,365 nanograms per joule) in any one hour period, provided the emissions from any such source located in the City of Peoria exist from a stack which is at least 154 feet (47 meters) in height.

c) Sections 214.122 and 214.101(c) shall not apply to any fuel combustion emission sources equipped with flue gas desulfurization systems as of December 1, 1980, and located in the City of East Peoria as the city boundaries were then defined. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any such sources to exceed 1.4 pounds of sulfur dioxide per mmbtu of actual heat input (602 nanograms per joule).

d) Sections 214.122 and 214.101(c) shall not apply to any fuel combustion emission sources which are capable of firing solid fuel at a heat input of more than 125 mmbtu per hour (36.6 megawatts) and which as of December 1, 1980, are equipped with flue gas desulfurization systems and are located in Hollis Township, Peoria County, as the township boundaries were then defined. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any such source to exceed 1.1 pounds of sulfur dioxide per mmbtu of actual heat input (473 nanograms per joule).

[Source: Amended at 10 Ill. Reg. 9806, effective May 20, 1986]

Section 214.142 Small Sources Located Outside Metropolitan Areas

This Section applies to existing fuel combustion sources with actual heat input less than, or equal to, 73.2 MW (250 mmbtu/hr) located outside the Chicago, St. Louis (Illinois) or Peoria major metropolitan areas. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any

existing fuel combustion source with actual heat input less than, or equal to, 73.2 MW (250 mmbtu/hr), burning solid fuel exclusively, located outside the Chicago, St. Louis (Illinois) or Peoria major metropolitan areas, to exceed either of the following, whichever such person determines shall apply:

a) 10.5 kg of sulfur dioxide per MW-hr of actual heat input (6.8 lbs/mmbtu), provided such owner or operator complied with all applicable provisions of Section 214.186, or

b) The emission limit provided by Subpart E.

[Source: Amended at 4 Ill. Reg. 417, effective June 26, 1980]

Section 214.143 Large Sources Located Outside Metropolitan Areas

This Section applies to existing fuel combustion sources with actual heat input greater than 73.2 MW (250 mmbtu/hr), located outside the Chicago, St. Louis (Illinois) or Peoria major metropolitan areas. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any existing fuel combustion source with actual heat input greater than 73.2 MW (250 mmbtu/hr), burning solid fuel exclusively, located outside the Chicago, St. Louis (Illinois) or Peoria major metropolitan areas, to exceed the emission limit provided by Subpart E.

[Source: Amended at 4 Ill. Reg. 417, effective June 26, 1980]

SUBPART D: EXISTING LIQUID OR MIXED FUEL COMBUSTION EMISSION SOURCES

Section 214.161 Liquid Fuel Burned Exclusively

No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any existing fuel combustion emission source, burning liquid fuel exclusively:

a) To exceed 1.55 kg of sulfur dioxide per MW-hr of actual heat input when residual fuel oil is burned (1.0 lbs/mmbtu);

b) To exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmbtu).

Section 214.162 Combination of Fuels

a) No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any fuel combustion emission source burning simultaneously any combination of solid, liquid and gaseous fuels to exceed the allowable emission rate determined by the following equation:

$$E = AX + BY + CZ$$

b) Symbols in the equation mean the following:

- E = allowable sulfur dioxide emission rate;
- A = solid fuel sulfur dioxide emission standard which is applicable;
- B = distillate oil sulfur dioxide emission standard determined from the table in subsection (d);
- C = residual fuel oil sulfur dioxide emission standard which is applicable;
- X = actual heat input from solid fuel;
- Y = actual heat input from distillate fuel oil;
- Z = actual heat input from residual fuel oil.

c) That portion of the actual heat input that is derived:

- 1) From the burning of gaseous fuels produced by the gasification of solid fuels shall be included in X;
- 2) From the burning of gaseous fuels produced by the gasification of distillate fuel oil shall be included in Y;
- 3) From the burning of gaseous fuels produced by the gasification of residual fuel oil shall be included in Z;
- 4) From the burning of gaseous fuels produced by the gasification of any other liquid fuel shall be included in Z; and,
- 5) From the burning of by-product gases such as those produced from a blast furnace or a catalyst regeneration unit in a petroleum refinery shall be included in Z.

d) Metric or English units may be used in the equation of subsection (a) as follows:

Parameter	Metric	English
E	kg/hr	lbs/hr
A, C	kg/MW-hr	lbs/MMBtu
B	0.46 kg/MW-hr	0.3 lbs/MMBtu
X, Y, Z	MW	MMBtu/hr

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

SUBPART E: AGGREGATION OF SOURCES OUTSIDE METROPOLITAN AREAS

Section 214.181 Dispersion Enhancement Techniques

No owner or operator of an existing fuel combustion emission source shall comply with the emission standards of this Subpart by the use of dispersion enhancement techniques. Dispersion enhancement techniques shall include; but not be limited to, an intermittent control system or an increase of: stack height in excess of good engineering practice necessary to prevent downwash or fumigation conditions, stack

diameter, exit gas velocity, or exit gas temperature, except as provided by Section 123 of the Clean Air Act (42 U.S.C. 7423) and regulations promulgated thereunder. Flue gas may be reheated where air pollution control equipment results in a reduction of flue gas temperature, provided that the degree of reheat does not exceed the temperature drop across such air pollution control equipment.

(Source: Amended at 3 Ill. Reg. 777, effective February 3, 1979)

Section 214.182 Prohibition

No person shall cause or allow the total emissions of sulfur dioxide into the atmosphere in any one hour period from all fuel combustion emission sources, located outside of the Chicago, St. Louis (Illinois) or Peoria major metropolitan areas, owned or operated by such person and located within a 1 mile radius (1.6 km) from the center point of any such fuel combustion emission source to exceed the emissions determined by the following Sections 214.183 through 214.185, whichever is applicable.

Section 214.183 General Formula

a) The general formula is:

$$E = A X^B Y^C$$

b) Symbols used in the general formula mean the following:

- E = Total allowable emission of sulfur dioxide into the atmosphere in any one-hour period from all fuel combustion emission sources owned or operated by such person and located within a 1.6 km (1 mile) radius from the center point of any such emission source.
- X = Average actual stack height as determined by method outlined in Appendix C.
- Y = Effective height of effluent release as determined by method outlined in Appendix C.

c) The general formula may be used with either metric or English units as follows:

Parameter	Metric	English
E	kg/hr	lbs/hr
X, Y	m	ft
A	0.04347 kg/hr	0.007813 lbs/hr
B	0.11	0.11
C	2	2

(Source: Amended at 4 Ill. Reg. 417, effective June 26, 1980)

Section 214.184 Special Formula

a) If the maximum total emissions of sulfur dioxide into the atmosphere in any one hour period from all fuel combustion emission sources owned or operated by any person and located within 1 mile (1.6 km) radius from

the center point of any such fuel combustion emission sources exceed, during normal cyclical variations in firing rate and fuel, the emissions allowed under Section 214.183 but, as of April 1, 1978, were in compliance with either the formula detailed below or a Board order, then the owner or operator of the emission sources shall not cause or allow such emissions to exceed the emissions allowed under Section 214.183 or the formula detailed below, whichever the owner or operator of the emission sources determines shall apply.

$$b) E = 0.2222H^2$$

$$H = P_1H_1 + P_2H_2 + \dots + P_nH_n$$

(Note: $P_1 + P_2 + \dots + P_n = 1$)

c) As used in these equations, symbols mean the following:

E = total emission of sulfur dioxide, in pounds per hour, into the atmosphere in any one hour period from all fuel combustion emission sources owned or operated by such person and located within a 1 mile radius from the center point of any such emission source,

P_i , $i = 1, 2, \dots, n$ = percentage of total emissions E emitted from source i divided by 100, and

H_i , $i = 1, 2, \dots, n$ = physical height in feet above grade of stack i .

(Source: Amended at 4 Ill. Reg. 28, p. 417, effective June 26, 1980)

Section 214.185 Alternative Emission Rate

Any owner or operator of a fuel combustion emission source may petition the Board for approval of an emission rate applicable to any one hour period for all fuel combustion emission sources owned or operated by such person and located within a one mile (1.6 km) radius from the center point of any such fuel combustion emission source. Such person shall prove in an adjudicative hearing before the Board that the proposed emission rate will not under any foreseeable operating conditions and potential meteorological conditions cause or contribute to a violation of any applicable primary or secondary sulfur dioxide ambient air quality standard or violate any applicable prevention of significant deterioration (PSD) increment. An emission rate approved pursuant to this Section shall be a substitute for that standard determined by Section 214.183 or 214.184.

- Every owner or operator of a fuel combustion emission source petitioning the Board for approval of an emission standard pursuant to this Section shall follow the applicable procedures described in 35 Ill. Adm. Code: Subtitle A, Chapter I.
- Any emission standard approved pursuant to this Section shall be included as a condition to operating permits issued pursuant to 35

Ill. Adm. Code 201. Any owner or operator of a fuel combustion emission source who receives Board approval of an emission standard pursuant to this Section shall apply to the Agency within 30 days of approval of such standard for a revision of its operating permit for such source.

- The Agency shall impose as a condition to a permit to operate a source pursuant to an emission standard approved pursuant to this Section an ambient sulfur dioxide monitoring and dispersion modeling program designed to verify that such emission standard will not cause or contribute to violations of any applicable primary or secondary sulfur dioxide ambient air quality standard. Such ambient monitoring and dispersion modeling program shall be operated for at least one year commencing no later than 6 months after the date of approval of an emission rate pursuant to this Section.
- No more than 15 months after the commencement of the ambient monitoring and dispersion modeling program of subsection (c) the owner or operator shall apply for a new operating permit. The owner or operator shall submit, at the time of the application, a report containing the results of the ambient monitoring and dispersion modeling program.

(Source: Amended at 4 Ill. Reg. 417, effective June 26, 1980)

Section 214.186 New Operating Permits

No owner or operator of a fuel combustion emission source whose sulfur dioxide emission limitation is determined by Section 214.142, 214.183 or 214.184 shall cause or allow the total emissions of sulfur dioxide into the atmosphere from all fuel combustion emission sources owned or operated by such person and located within 1 mile radius (1.6 km) from the center point of any such fuel combustion source to exceed the level of sulfur dioxide emissions allowed under the previous Rule 204 (effective April 14, 1972 until December 14, 1978) without first obtaining a new operating permit from the Agency. The application for a new operating permit shall include a demonstration that such total emissions will not violate any applicable PSD increment.

(Source: Amended at 4 Ill. Reg. 417, effective June 26, 1980)

SUBPART F: ALTERNATIVE STANDARDS FOR SOURCES INSIDE METROPOLITAN AREAS

Section 214.201 Alternative Standards for Sources in Metropolitan Areas

Any owner or operator of an existing fuel combustion emission source located in the Chicago, St. Louis (Illinois) or Peoria major metropolitan areas may petition the Board for approval of an alternate emission rate specified

in emissions of pounds of sulfur dioxide per mbtu of actual heat input for any such fuel combustion emission source, up to a maximum of 6.8 pounds of sulfur dioxide per mbtu of actual heat input (10.5 kg/MWhr). Such person shall prove in an adjudicative hearing before the Board that the proposed emission rate will not, under predictable worst case conditions cause or contribute to a violation of any applicable primary or secondary sulfur dioxide ambient air quality standard or of any applicable PSD increment. An emission rate approved pursuant to this Section shall be a substitute for that standard otherwise required by this Part.

a) Every owner or operator of an existing fuel combustion emission source so petitioning the Board for approval of an emission standard shall follow the applicable procedures described in 35 Ill. Adm. Code: Subtitle A, Chapter 1.

b) Any emission standard so approved shall be included as a condition in operating permits issued pursuant to 35 Ill. Adm. Code 201. Any owner or operator of a fuel combustion emission source who receives Board approval of such an emission standard shall apply to the Agency within 30 days of approval of such standard for a revision of its operating permit for such source.

c) No owner or operator of an existing fuel combustion emission source shall seek such an exemption or comply with the emission standard so granted by the use of dispersion enhancement techniques referred to in Section 214.202.

(Source: Adopted at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.202 Dispersion Enhancement Techniques

No owner or operator of an existing fuel combustion emission source shall comply with the emission standards of this Subpart by the use of dispersion enhancement techniques. Dispersion enhancement techniques shall include, but not be limited to, an intermittent control system or an increase of: stack height in excess of good engineering practice necessary to prevent downwash or fumigation conditions, stack diameter, exit gas velocity, or exit gas temperature, except as provided by Section 123 of the Clean Air Act (42 U.S.C. 7423) and regulations promulgated thereunder. Flue gas may be reheated where air pollution control equipment results in a reduction of flue gas temperature, provided that the degree of reheat does not exceed the temperature drop across such air pollution control equipment.

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

SUBPART K: PROCESS EMISSION SOURCES

Section 214.300 Scope

Subpart K contains general rules for sulfur emissions from process sources. These may be modified by industry and site specific rules in Subparts M et seq.

(Source: Added and codified at 7 Ill. Reg. 13597)

Section 214.301 General Limitation

Except as further provided by this Part, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.302 Exception For Air Pollution Control Equipment

Section 214.301 shall not apply to processes designed to remove sulfur compounds from the flue gases of fuel combustion emission sources.

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.303 Use of Sulfuric Acid

With the exception of fuel combustion emission sources and acid manufacturing, no person using sulfuric acid shall cause or allow the emission of sulfuric acid and/or sulfur trioxide from all other similar emission sources at a plant or premises to exceed:

a) 45.4 grams in any one hour period for sulfuric acid usage less than 1180 Mg/yr (100 percent acid basis) (0.10 lbs/hr up to 1300 T/yr);

b) 250 grams per metric ton of acid used for sulfuric acid usage greater than or equal to 1180 Mg/yr (100 percent acid basis) (0.50 lbs/T over 1300 T/yr).

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.304 Fuel Burning Process Emission Source

The emissions from the burning of fuel at process emission sources located in the Chicago or St. Louis (Illinois) major metropolitan areas shall comply with applicable Subparts B through F, except as follows: No person shall cause or allow the emissions of sulfur into the atmosphere in any one hour period from burning

tea leaves as fuel to exceed 0.70 pounds of sulfur dioxide per mbtu of actual heat input.

(Source: Added at 7 Ill. Reg. 4219, effective March 28, 1983)

**SUBPART O: PETROLEUM REFINING,
PETROCHEMICAL AND CHEMICAL MANUFACTURING**

Section 214.380 Scope

a) This Subpart contains rules which modify the general sulfur emission rules of Subparts A through M as applied to a given industry or at a given site. General rules include:

- 1) Subparts B through J: Fuel combustion emission sources and incinerators;
- 2) Subparts K through M: Process emission sources.

b) These rules have been grouped for the convenience of the public; the scope of each is determined by its language and history. Rules placed in this Subpart include those which appear to be primarily directed at the following major industry groups:

- 1) Chemicals and allied products;
- 2) Petroleum refining and related industries;
- 3) Rubber and miscellaneous plastics products.

(Source: Added and codified at 7 Ill. Reg. 13597)

Section 214.381 Sulfuric Acid Manufacturing

a) No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any new sulfuric acid manufacturing plant to exceed 4.0 pounds of sulfur dioxide per ton of acid produced (2.0 kg/Mg).

b) No person shall cause or allow the emission of sulfuric acid mist into the atmosphere from any process emission source to exceed 0.15 pounds of acid mist per ton of acid manufactured (75 g/Mg).

c) No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any sulfuric acid manufacturing process in the City of Chicago to exceed 500 ppm.

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.382 Petroleum and Petrochemical Processes

a) Section 214.301 shall not apply to existing processes designed to remove sulfur compounds from the flue gases of petroleum and petrochemical processes.

b) No person shall cause or allow the emission of more than 1,000 ppm of sulfur dioxide into the atmosphere from any process emission source in the St. Louis (Illinois) major metropolitan area designed to remove sulfur compounds from the flue gases of petroleum and petrochemical processes.

c) The following limitations apply to any petroleum refinery in the Village of Roxana:

1) No person shall cause or allow the combustion of refinery flasher pitch containing more than 3.0% (three percent) sulfur by weight. This shall be demonstrated by daily sampling of refinery flasher pitch.

2) No person shall burn petroleum refinery fuel gas in any fuel gas combustion device if that refinery fuel gas contains more than 39 grains hydrogen sulfide per 100 dry standard cubic feet (891 mg/scf). This shall be demonstrated by sampling the refinery fuel gas once every eight hours, pursuant to the Tutwiler Procedure (Section 214.104(c)).

3) No person shall cause or allow the total emission of sulfur dioxide into the atmosphere from the following source groupings to exceed the following amounts:

A) All process heaters at distilling unit No. 1 - 459 lbs/hr (208 kg/hr).

B) All process heaters at distilling unit No. 2 - 1260 lbs/hr (571 kg/hr).

C) All gas plant process heaters - 159 lbs/hr (72.1 kg/hr).

D) All vacuum flasher unit heaters - 378 lbs/hr (171 kg/hr).

E) All process heaters at the alkylation, benzene extraction unit and catalytic feed hydrotreating units - 346 lbs/hr (157 kg/hr).

F) All boilers generating steam for general plant use - 2,400 lbs/hr (1,090 kg/hr).

G) All heaters serving the hydrocracker unit catalytic reformer No. 1, and the saturates gas plant - 1,660 lbs/hr (753 kg/hr).

H) All process heaters at the aromatics east process - 768 lbs/hr (348 kg/hr).

I) All catalytic cracking units - 3,430 lbs/hr (1,560 kg/hr).

J) All asphalt converters, distilling unit No. 1, the aromatics east process, all boilers generating steam for general plant use, and all gas plant process heaters - 2,710 lbs/hr (1,230 kg/hr).

d) Compliance with the emission limitations of subsections (b) and (c)(3) of this Section shall be demonstrated on a three-hour block average basis. Such demonstrations shall require, as a permit condition, that data as required by the Illinois Environmental Protection Agency (35 Ill. Adm. Code 201.161) be maintained in order to adequately determine the sulfur dioxide emission rate from each source operations group.

e) Sources in the Village of Roxana are not subject to the emission limitations of Section 214.162 when burning refinery flasher pitch or refinery fuel gas.

f) Individual process emission sources in the Village of Roxana are still subject to the emission limitation of Section 214.301 notwithstanding their inclusion in a source operations group.

g) Notwithstanding the provisions of 35 Ill. Adm. Code 201.102 of this Chapter, any physical change in any emission source, subject to subsections (b), (c), (d), or (e) of this Section which alters the height of release, temperature or volumetric flow rate of the effluent gases of such source, or alters the diameter of the exit stack, shall be deemed a modification for the purposes of 35 Ill. Adm. Code 201.142 of this Chapter.

(Source: Amended at 12 Ill. Reg. 20778, effective December 5, 1988)

Section 214.383 Chemical Manufacturing

Section 214.301 shall not apply to existing hydrogen sulfide flares at a chemical manufacturing plant provided:

- Said flares are operative on existing batch type processes; and
- The hydrogen sulfide emissions being flared are not, as of September 11, 1975, passed through existing processes designed to remove sulfur compounds from the flue gases as provided in Section 214.382(a); and
- The emission of sulfur dioxide into the atmosphere from said flares does not exceed 500 pounds per hour and 1500 pounds per eight-hour period (230 kg/hr and 1590 kg/8 hrs); and
- Provided, however, that if emission controls for said flares become economically reasonable and technically feasible the owner/operator of such hydrogen sulfide flares shall install such controls.

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.384 Sulfate and Sulfite Manufacturing

Section 214.301 shall not apply to sodium aluminum sulfate and sodium sulfite.

manufacturing process emission sources in the St. Louis (Illinois) major metropolitan area.

(Source: Added at 7 Ill. Reg. 4219, effective March 28, 1983)

SUBPART P: STONE, CLAY, GLASS AND CONCRETE PRODUCTS

Section 214.400 Scope

a) This Subpart contains rules which modify the general sulfur emission rules of Subparts A through M as applied to a given industry or at a given site. General rules include:

- Subparts B through I: Fuel combustion emission sources and incinerators;
- Subparts K through M: Process emission sources.

b) These rules have been grouped for the convenience of the public; the scope of each is determined by its language and history. Rules placed in this Subpart include those which appear to be primarily directed at the following major industry group: stone, clay, glass and concrete products.

(Source: Added and codified at 7 Ill. Reg. 13597)

Section 214.401 Glass Melting and Heat Treating

Section 214.301 shall not apply to:

- Glass melting furnaces in the Chicago or St. Louis (Illinois) major metropolitan areas.
- Glass heat treating with sulfur dioxide in the St. Louis (Illinois) major metropolitan area.

(Source: Adopted at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.402 Lime Kilns

Section 214.304 notwithstanding, lime kilns (Standard Industrial Code 32) are not subject to limitations for sulfur dioxide emission.

(Source: Adopted at 7 Ill. Reg. 4219, effective March 28, 1983)

SUBPART Q: PRIMARY & SECONDARY METAL MANUFACTURING

Section 214.420 Scope

a) This Subpart contains rules which modify the general sulfur emission rules of Subparts A through M as applied to a given industry or at a given site. General rules include:

- 1) Subparts B through I: Fuel combustion emission sources and incinerators;
 - 2) Subparts K through M: Process emission sources.
- b) These rules have been grouped for the convenience of the public; the scope of each is determined by its language and history. Rules placed in this Subpart include those which appear to be primarily directed at the following major industry groups:
- 1) Primary metal industries (including primary and secondary production of ferrous and nonferrous metals);
 - 2) Fabricated metal products.

(Source: Added and codified at 7 Ill Reg. 13597)

Section 214.421 Combination of Fuels at Steel Mills in Metropolitan Areas

- a) Section 214.162 notwithstanding, no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any existing fuel combustion emission source at a steel mill located in the Chicago or St. Louis (Illinois) major metropolitan area burning any solid, liquid or gaseous fuel, or any combination thereof, to exceed the allowable emission rate determined by the following equation:

$$E = AW + BX + CY + DZ$$

- b) Symbols in the equation mean the following:

- E = allowable sulfur dioxide emission rate;
- A = solid fuel sulfur dioxide emission standard which is applicable;
- B = distillate oil sulfur dioxide emission standard determined from the table in subsection (d);
- C = residual oil sulfur dioxide emission standard which is applicable;
- D = maximum by-product gas sulfur dioxide emissions which would result if the applicable by-product gas which was burned had been burned alone at any time during the 12 months preceding the latest operation, on or before March 28, 1983, of an emission source using any by-product gas;
- W = actual heat input from solid fuel;
- X = actual heat input from distillate fuel oil;
- Y = actual heat input from residual fuel oil;
- Z = actual heat input from by-product gases, such as those produced from a blast furnace.

- c) That portion of the actual heat input that is derived:

- 1) From the burning of gaseous fuels produced by the gasification of solid fuels shall be included in W;
- 2) From the burning of gaseous fuels produced by the gasification of

distillate fuel oil shall be included in X;

- 3) From the burning of gaseous fuels produced by the gasification of residual fuel oil shall be included in Y; and
- 4) From the burning of gaseous fuels produced by the gasification of any other liquid fuel shall be included in Z.

- d) Metric or English units may be used in the equation of subsection (a) as follows:

Parameter	Metric	English
E	kg/hr	lbs/hr
A, C, D	kg/MW-hr	lbs/MMBtu
B	0.46 kg/MW-hr	0.3 lbs/MMBtu
W, X, Y, Z	MW	MMBtu/hr

(Source: Adopted at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.422 Secondary Lead Smelting in Metropolitan Areas

Section 214.301 shall not apply to secondary lead smelting process emission sources in the Chicago or St. Louis (Illinois) major metropolitan areas.

(Source: Adopted at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.423 Slab Reheat Furnaces in St. Louis Area

Section 214.304 notwithstanding, slab reheat furnaces in the St. Louis (Illinois) major metropolitan area with fuel burning capacities in excess of 650 MMBtu/hr and burning any residual fuel shall not be subject to the applicable Subparts B through F so long as the total sulfur dioxide emissions resulting from the burning of residual fuel oil in all such furnaces at any one steel mill do not exceed 730 lbs/hr.

(Source: Adopted at 7 Ill. Reg. 4219, effective March 28, 1983)

SUBPART V: ELECTRIC POWER PLANTS

Section 214.521 Winnetka Power Plant

Notwithstanding Sections 214.101 and 214.141, the Village of Winnetka Electric Utility Plant shall not cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from its existing fuel combustion sources, burning solid fuel exclusively, to exceed 5.7 pounds of sulfur dioxide per MMBtu of actual heat input (8.8 kg/MW-hour). Compliance with this limitation shall be demonstrated on the basis of a daily average.

(Source: Adopted at 8 Ill. Reg. 6172, effective April 24, 1984)

SUBPART X: UTILITIES

Section 214.560 Scope

a) This Subpart contains rules which modify the general sulfur emission rules of Subparts A through M as applied to a given industry or at a given site. General rules include:

- 1) Subparts B through I: Process emission sources and incinerators;
- 2) Subparts K through M: Process emissions sources.

b) These rules have been grouped for the convenience of the public; the scope of each is determined by its language and history. Rules placed in this Subpart include those which appear to be primarily directed at the following major industry groups: electric, gas and sanitary services.

(Source: Added at 10 Ill. Reg. 9806, effective May 20, 1986)

Section 214.561 E.D. Edwards Electric Generating Station

Units 1 and 3 at the E.D. Edwards Electric Generating Station shall not exceed 6.6 pounds of sulfur dioxide per mm Btu of actual heat input (2,838 nanograms per joule). Aggregate emissions from the E.D. Edwards Electric Generating Station, on a 24-hour average basis shall not exceed 14,613 pounds of sulfur dioxide per hour.

(Source: Added at 10 Ill. Reg. 9806, effective May 20, 1986)

Section 214.562 Coffeen Generating Station

a) The emission standards of this subsection shall apply only if the requirements of subsections (b), (c), and (d) are fulfilled. Notwithstanding any other limitation contained in this Part, whenever the coal burned is mined exclusively from the mine that is presently known as Monterey Coal Company's No. 1 Mine located south of Carlinville, emission of sulfur dioxide from Units 1 and 2 at the Central Illinois Public Service Company's (CIPS) Coffeen Generating Station (Coffeen), located in Montgomery County, shall not exceed either of the following emission standards:

- 1) 29.572 kilograms of sulfur dioxide in any one hour (65.194 lbs/hr); and
- 2) 11.29 kilograms of sulfur dioxide per megawatt-hour of heat input (7.29 lbs/mmBtu).

b) CIPS shall conduct an ambient sulfur dioxide monitoring and dispersion modeling program

designed to demonstrate that the emission standards of subsection (a) will not cause or contribute to violations of any applicable primary or secondary sulfur dioxide ambient air quality standard as set forth in Section 243.122. Such ambient monitoring and dispersion modeling program shall be operated for at least one year commencing no later than 6 months after Coffeen is legally able and begins to operate at an emission rate greater than 55,555 pounds of sulfur dioxide per hour.

c) No more than 15 months after the commencement of the ambient monitoring and dispersion modeling program of subsection (b), CIPS shall apply for a new operating permit. CIPS shall submit to the Environmental Protection Agency (Agency), at the time of the application, a report containing the results of the ambient monitoring and dispersion modeling program of subsection (b) and the results of all relevant stack tests conducted prior to the report's submission.

d) No later than six months after Coffeen is legally able and begins to operate at an emission rate greater than 55,555 pounds of sulfur dioxide per hour, a stack test shall be conducted in accordance with Section 214.101(a), in order to determine compliance with emission standards set forth in subsection (a). After the stack test is conducted, the results shall be submitted to the Agency within 90 days. The requirements of this subsection do not preclude the Agency from requiring additional stack tests.

(Source: Added at 12 Ill. Reg. 17387, effective October 14, 1988)

Appendix A Rule Into Section Table

RRR-22	Old Ch. 2	Part 214
204(a)	204(a)	214.121
204(b)	204(b)	214.122
204(c)	204(c)(1)(B)	214.142
204(d)	204(c)(1)(C)	214.143
204(e) Intro	204(e) Intro	214.182
204(e)(1)	204(e)(1)	214.183, Appendix C
204(e)(2)	204(e)(2)	214.184
204(e)(3)	204(e)(3)	214.185
204(e)(4)	204(e)(4)	214.186
204(f) Intro	204(c)(1)(A)	214.141
204(f)(1)	----	214.141(a)
204(f)(2)	----	214.141(b)
204(g)	----	214.201
204(h)	204(c)(2) (A)&(B)	214.161
204(i)(1)	204(d)	214.162
204(i)(2)	----	214.421
204(j) Intro	----	214.304
204(j)(1)	----	214.423
204(j)(2)	----	214.304
204(j)(3)	----	214.402
204(k) Intro	204(f)(1)(A)	214.301
204(k)(1)(A)	204(f)(1)(C)	214.302
204(k)(1)(B)	204(f)(1)(D)	214.382(a)
204(k)(1)(C)	204(f)(1)(E)	214.383
204(k)(1)(D)	----	214.384(a)

880-22	Old Ch. 2	Part 214
204(k)(1)(E)	----	214.384(b)
204(k)(1)(F)	----	214.422
204(k)(1)(G)	----	214.401(a)
204(k)(1)(H)	----	214.401(b)
204(k)(2)	----	214.382(b)
204(k)(3)	----	214.381(c)
204(k)(4)	204(f)(1)(B)	214.381(a)
204(l)(1)	204(f)(2)(A)	214.381(b)
204(l)(2)	204(f)(2)(B)	214.383
204(m)	204(g)	214.301
204(n)	204(n)	Appendix D
204(o)	204(i)	214.181, 214.202
		214.521

Appendix B
Section Info. Rule Table

Part 214	Old Ch. 2	880-22
214.100	----	Added in Codification
214.101	204(g)	204(m)
214.102	----	Added in Codification
214.103	----	Added in Codification
214.104	----	Added in Codification
214.120	----	Added in Codification
214.121	204(a)	204(a)
214.122	204(b)	204(b)
214.141	204(c)(1)(A)	204(f)
214.142	204(c)(1)(B)	204(c)
214.143	204(c)(1)(C)	204(d)
214.161	204(c)(2)(A) & (B)	204(h)
214.162	204(d)	204(i)(1)
214.181	204(i)	204(o)
214.182	204(e) Intro	204(e) Intro
214.183	204(e)(1)	204(e)(1)
214.184	204(e)(2)	204(e)(2)
214.185	204(e)(3)	204(e)(3)
214.186	----	204(e)(4)
214.201	----	204(g)
214.202	----	204(o)
214.300	----	Added in Codification
214.301	204(f)(1)(A)	204(k) Intro
214.302	204(f)(1)(C)	204(k)(1)(A)
214.303	204(f)(2)(B)	204(l)(2)
214.304	----	204(j) Intro & (2)
214.380	----	Added in Codification
214.381(a)	204(f)(1)(B)	204(k)(4)
214.381(b)	204(f)(2)(A)	204(l)(1)
214.381(c)	----	204(k)(3)
214.382(a)	204(f)(1)(D)	204(k)(1)(B)
214.382(b)	----	204(k)(2)
214.383	204(f)(1)(E)	204(k)(1)(C)
214.384	----	204(k)(1)(D) & (E)
214.400	----	Added in Codification
214.401	----	204(k)(1)(G) & (H)
214.402	----	204(j)(3)
214.420	----	Added in Codification
214.421	----	204(l)(2)
214.422	----	204(k)(1)(F)

Part 214	Old Ch. 2	880-22
214.423	----	204(j)(1)
214.521	----	----
Appendix A	----	Added in Codification
Appendix B	----	Added in Codification
Appendix C	204(e)(1)	204(e)(1)
Appendix D	204(n)	204(n)

Appendix C
Method Used to Determine Average Actual Stack Height and Effective Height of Effluent Release

Q (btu/sec) = Heat emission rate as determined by method outlined SETOW.

N (feet) = Plume rise.

H = Physical height in feet, above grade of each stack, except that for purposes of this calculation the value used for such stack height shall not exceed good engineering practice as defined by Section 123 of the Clean Air Act and Regulations promulgated thereunder, unless the owner or operator of the source demonstrates to the Agency that a greater height is necessary to prevent downwash or fumigation conditions.

T (Degrees Rankine) = Exit temperature of stack gases from each source during operating conditions which would cause maximum emissions.

V (feet/sec) = Exit velocity of stack gases from each source under operating conditions which would cause maximum emissions.

D (feet) = Diameter of stack.

P = Percentage of total emissions expressed as decimal equivalents emitted from each source. Example: 21% = 0.21. NOTE: the sum of $P_1 + P_2 + \dots + P_n = 1$. The emission values to be used are those which occur during operating conditions which would cause maximum emissions.

X = Average actual stack height.

Y = Effective height of effluent release.

STEP 1: Determine weighted average stack parameters utilizing the following formulae:

$$D = P_1 D_1 + P_2 D_2 + \dots + P_n D_n$$

$$V = P_1 V_1 + P_2 V_2 + \dots + P_n V_n$$

$$T = P_1 T_1 + P_2 T_2 + \dots + P_n T_n$$

$$X = P_1 H_1 + P_2 H_2 + \dots + P_n H_n$$

NOTE:

P_1, D_1, V_1, T_1 and H_1 are the percentage of total emissions, stack diameter, exit velocity of gases, exit temperature of stack gases, and physical stack height, respectively, for the first source; P_2, D_2, V_2, T_2 and H_2 are

the respective values for the second source; similarly, P_n , D_n , V_n , T_n and H_n are the respective values for the nth source, where n is the number of the last source.

STEP 2: Calculate heat emission rate utilizing the following formula and the weighted average stack parameters obtained in Step 1:

$$Q = 7.54D^2V(T - 515)$$

STEP 3: Calculate plume rise utilizing the appropriate formula given below and the total heat emission rate obtained in Step 2:

$$H = 2.58 (Q)^{0.6} \quad \text{for } Q \text{ 6000 btu/sec.} \\ (X) 0.11$$

$$H = 0.718 (Q)^{0.75} \quad \text{for } Q \text{ 6000 btu/sec.} \\ (X) 0.11$$

STEP 4: Calculate the weighted average facility effective height of effluent release utilizing the plume rise obtained in Step 3, the average stack height obtained in Step 1 and the formula given below:

$$Y = X + H$$

STEP 5: Calculate the total facility hourly emission limitation utilizing the weighted actual stack height obtained in Step 3, the effective stack height given in Step 4, and the following formula:

$$E = \frac{(X)^{0.11} (Y)^2}{128}$$

Appendix D Past Compliance Dates

Rule	Type of Source	Compliance Date
204(b)	New fuel combustion fuel emission sources	April 14, 1972
204(c)	St. Louis (Illinois) and Peoria HMA's with actual heat input less than, or equal to, 250 million btu per hour	
(a)	Sources determining the 6.8 lbs/mbtu standard shall apply	December 14, 1978
(b)	Sources determining Rule 204(e) shall apply	See Rule 204(e)
204(d)	Existing sources outside the Chicago, St. Louis (Illinois) and Peoria HMA's with actual heat input greater than 250 million btu per hour	See Rule 204(e)
204(e)(1) and (2)	Fuel combustion sources located outside Chicago, St. Louis (Illinois) and Peoria HMA's which obtain an alternate emission rate	December 14, 1978
(a)	If source is in compliance with previous Rule 204(e) (effective April 14, 1972 until December 14, 1978) prior to December 14, 1978	Date of commencement of monitoring and modeling pursuant to Rule 204 (e)(3)(C)
(b)	If source is not in compliance with the previous Rule 204(e) (effective from April 14, 1972 until December 14, 1978) prior to December 14, 1978	Date of approval of alternate standard
(b)	If source is not in compliance with the previous Rule 204(e) (effective from April 14, 1972 until December 14, 1978) prior to December 14, 1978	Date of approval of alternate standard
204(f)	Existing sources in the Chicago, St. Louis (Illinois) or Peoria HMA's burning solid fuel exclusively	March 28, 1983
204(g)	Existing sources in the Chicago, St. Louis (Illinois) or Peoria HMA's burning solid fuel exclusively which obtain an alternate emission rate	Date of approval of alternate standard
204(h)	Existing sources burning liquid fuel exclusively	May 30, 1975
204(i)	Combination of fuels sources except at a steel mill. Combination of fuels sources at a steel mill.	April 14, 1972
204(j)	Fuel burning process emission sources	March 28, 1983
204(k)(1) (A)-(C)	Process emission sources Existing sources New sources	December 31, 1973 December 14, 1978

204(k)(1) Process emission
(0)-(H) sources

March 28, 1983

204(k)(2) New sources in the
and St. Louis and
(3) (Illinois) MUA
designed to remove
sulfur compounds from
the flue gases of
petroleum and petro-
chemical processes and
sulfuric acid
manufacturing processes
in the City of Chicago

March 28, 1983

204(1) Sources having emissions
of sulfuric acid mist
Existing sources
New Sources

December 31, 1973
December 14, 1978

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

CHAPTER I: POLLUTION CONTROL BOARD

SUBCHAPTER C: EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 215

ORGANIC MATERIAL EMISSION STANDARDS AND LIMITATIONS

SUBPART A: GENERAL PROVISIONS

Section	
215.100	Introduction
215.101	Clean-up and Disposal Operations
215.102	Testing Methods
215.103	Abbreviations and Conversion Factors
215.104	Definitions
215.105	Incorporations by Reference
215.106	Afterburners
215.107	Determination of Applicability

SUBPART B: ORGANIC EMISSIONS FROM STORAGE AND LOADING OPERATIONS

Section	
215.121	Storage Containers
215.122	Loading Operations
215.123	Petroleum Liquid Storage Tanks
215.124	External Floating Roofs
215.125	Compliance Dates and Geographical Areas
215.126	Compliance Plan

SUBPART C: ORGANIC EMISSIONS FROM MISCELLANEOUS EQUIPMENT

Section	
215.141	Separation Operations
215.142	Pumps and Compressors
215.143	Vapor Blowdown
215.144	Safety Relief Valves

SUBPART E: SOLVENT CLEANING

Section	
215.181	Solvent Cleaning in General
215.182	Cold Cleaning
215.183	Open Top Vapor Degreasing
215.184	Conveyorized Degreasing
215.185	Compliance Plan

SUBPART F: COATING OPERATIONS

Section	
215.202	Compliance Schedules
215.204	Emission Limitations for Manufacturing Plants
215.205	Alternative Emission Limitations
215.206	Exemptions from Emission Limitations
215.207	Compliance by Aggregation of Emission Sources
215.208	Testing Methods for Solvent Content
215.209	Exemption from General Rule on Use of Organic Material
215.210	Alternative Compliance Schedule
215.211	Compliance Dates and Geographical Areas

215.212	Compliance Plan
215.213	Special Requirements for Compliance Plan

SUBPART H: SPECIAL LIMITATIONS FOR SOURCES IN MAJOR URBANIZED AREAS WHICH ARE NONATTAINMENT FOR OZONE

Section	
215.240	Applicability
215.241	External Floating Roofs
215.245	Flexographic and Rotogravure Printing
215.249	Compliance Dates

SUBPART I: ADJUSTED-RATE EMISSIONS LIMITATIONS

Section	
215.260	Applicability
215.261	Petition
215.263	Public Hearing
215.264	Board Action
215.267	Agency Petition

SUBPART K: USE OF ORGANIC MATERIAL

Section	
215.301	Use of Organic Material
215.302	Alternative Standard
215.303	Fuel Combustion Emission Sources
215.304	Operations with Compliance Program
215.305	Viscose Exemption (Repealed)

SUBPART N: VEGETABLE OIL PROCESSING

Section	
215.340	Hexane Extraction Soybean Crushing
215.342	Hexane Extraction Corn Oil Processing
215.344	Recordkeeping for Vegetable Oil Processes
215.345	Compliance Determination
215.346	Compliance Dates and Geographical Areas
215.347	Compliance Plan

SUBPART P: PRINTING AND PUBLISHING

Section	
215.401	Flexographic and Rotogravure Printing
215.402	Exemptions
215.403	Applicability of Subpart K
215.404	Testing and Monitoring
215.405	Compliance Dates and Geographical Areas
215.406	Alternative Compliance Plan
215.407	Compliance Plan
215.408	Heatset Web Offset Lithographic Printing

SUBPART Q: LEAKS FROM SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING EQUIPMENT

Section	
215.420	Applicability
215.421	General Requirements
215.422	Inspection Program Plan for Leaks
215.423	Inspection Program for Leaks
215.424	Repairing Leaks
215.425	Recordkeeping for Leaks
215.426	Reporting for Leaks
215.427	Alternative Program for Leaks
215.428	Compliance Dates
215.429	Compliance Plan

215.430 General Requirements
 215.431 Inspection Program Plan for Leaks
 215.432 Inspection Program for Leaks
 215.433 Repairing Leaks
 215.434 Recordkeeping for Leaks
 215.435 Report for Leaks
 215.436 Alternative Program for Leaks
 215.437 Open-Ended Valves
 215.438 Compliance Plan

SUBPART R: PETROLEUM REFINING AND RELATED INDUSTRIES: ASPHALT MATERIALS

Section
 215.441 Petroleum Refinery Waste Gas Disposal
 215.442 Vacuum Producing Systems
 215.443 Wastewater (Oil/Water) Separator
 215.444 Process Unit Turnarounds
 215.445 Leaks: General Requirements
 215.446 Monitoring Program Plan for Leaks
 215.447 Monitoring Program for Leaks
 215.448 Recordkeeping for Leaks
 215.449 Reporting for Leaks
 215.450 Alternative Program for Leaks
 215.451 Sealing Device Requirements
 215.452 Compliance Schedule for Leaks
 215.453 Compliance Dates and Geographical Areas

SUBPART S: RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS

Section
 215.461 Manufacture of Pneumatic Rubber Tires
 215.462 Green Tire Spraying Operations
 215.463 Alternative Emission Reduction Systems
 215.464 Testing and Monitoring
 215.465 Compliance Dates and Geographical Areas
 215.466 Compliance Plan

SUBPART T: PHARMACEUTICAL MANUFACTURING

Section
 215.480 Applicability of Subpart T
 215.481 Control of Reactors, Distillation Units, Crystallizers, Centrifuges and Vacuum Dryers
 215.482 Control of Air Dryers, Production Equipment Exhaust Systems and Filters
 215.483 Material Storage and Transfer
 215.484 In-Process Tanks
 215.485 Leaks
 215.486 Other Emission Sources
 215.487 Testing
 215.488 Monitors for Air Pollution Control Equipment
 215.489 Compliance Schedule

SUBPART U: COKE MANUFACTURE AND BY-PRODUCT RECOVERY

Section
 215.500 Exception
 215.510 Coke By-Product Recovery Plants
 215.512 Coke By-Product Recovery Plant Leaks
 215.513 Inspection Program
 215.514 Recordkeeping Requirements
 215.515 Reporting Requirements
 215.516 Compliance Dates
 215.517 Compliance Plan

SUBPART V: AIR OXIDATION PROCESSES

Section
 215.520 Applicability
 215.521 Definitions
 215.525 Emission Limitations for Air Oxidation Processes
 215.526 Testing and Monitoring
 215.527 Compliance Date

SUBPART W: AGRICULTURE

Section
 215.541 Pesticide Exception

SUBPART X: CONSTRUCTION

Section
 215.561 Architectural Coatings
 215.562 Paving Operations
 215.563 Cutback Asphalt

SUBPART Y: GASOLINE DISTRIBUTION

Section
 215.581 Bulk Gasoline Plants
 215.582 Bulk Gasoline Terminals
 215.583 Gasoline Dispensing Facilities
 215.584 Gasoline Delivery Vessels

SUBPART Z: DRY CLEANERS

Section
 215.601 Perchloroethylene Dry Cleaners
 215.602 Exemptions
 215.603 Testing and Monitoring
 215.604 Compliance Dates and Geographical Areas
 215.605 Compliance Plan
 215.606 Exception to Compliance Plan
 215.607 Standards for Petroleum Solvent Dry Cleaners
 215.608 Operating Practices for Petroleum Solvent Dry Cleaners
 215.609 Program for Inspection and Repair of Leaks
 215.610 Testing and Monitoring
 215.611 Exemption for Petroleum Solvent Dry Cleaners
 215.612 Compliance Dates and Geographical Areas
 215.613 Compliance Plan

Subpart AA: PAINT AND INK MANUFACTURING

Section
 215.620 Applicability
 215.621 Exemption for Waterbase Material and Heatset Offset Ink
 215.623 Permit Conditions
 215.624 Open-top Mills, Tanks, Vats or Vessels
 215.625 Grinding Mills
 215.626 Leaks
 215.627 Clean Up
 215.636 Compliance Date

Subpart BB: POLYSTYRENE PLANTS

215.675 Applicability of Subpart BB
 215.677 Emissions Limitation at Polystyrene Plants

- 215.879 Compliance Date
- 215.881 Compliance Plan
- 215.883 Special Requirements for Compliance Plan
- 215.886 Testing and Monitoring

Subpart PP: MISCELLANEOUS FABRICATED PRODUCT MANUFACTURING PROCESSES

- Section 215.920 Applicability
- 215.921 Permit Conditions
- 215.926 Control Requirements

Subpart QQ: MISCELLANEOUS FORMULATION MANUFACTURING PROCESSES

- Section 215.940 Applicability
- 215.943 Permit Conditions
- 215.946 Control Requirements

Subpart RR: MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING PROCESSES

- Section 215.960 Applicability
- 215.963 Permit Conditions
- 215.966 Control Requirements

- Appendix A: Rule Into Section Table
- Appendix B: Section Into Rule Table
- Appendix C: Past Compliance Dates
- Appendix D: List of Chemicals Defining Synthetic Organic Chemical and Polymer Manufacturing
- Appendix E: Reference Methods and Procedures
- Appendix F: Coefficients for the Total Resource Effectiveness Index (TRE) Equation

AUTHORITY: Implementing Section 10 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1987, ch. 111 1/2, pars. 1010 and 1027).

SOURCE: Adopted as Chapter 2: Air Pollution, Rule 205: Organic Material Emission Standards and Limitations, R71-23, 4 PCB 191, filed and effective April 14, 1972; amended in R77-3, 33 PCB 357, at 3 Ill. Reg. 18, p. 41, effective May 3, 1979; amended in R78-3 and R78-4, 35 PCB 75, at 3 Ill. Reg. 30, p. 124, effective July 28, 1979; amended in R80-5 at 7 Ill. Reg. 1244, effective January 21, 1983; codified at 7 Ill. Reg. 13601; Notice of Corrections at 7 Ill. Reg. 14575; amended in R82-14 at 8 Ill. Reg. 13254, effective July 12, 1984; amended in R83-36 at 9 Ill. Reg. 9114, effective May 30, 1985; amended in R82-14 at 9 Ill. Reg. 13960, effective August 28, 1985; amended in R85-28 at 11 Ill. Reg. 3127, effective February 3, 1987; amended in R82-14 at 11 Ill. Reg. 7296, effective April 3, 1987; amended in R85-21(A) at 11 Ill. Reg. 11770, effective June 29, 1987; recodified in R86-39 at 11 Ill. Reg. 13541; amended in R82-14 and R86-12 at 11 Ill. Reg. 16706, effective September 30, 1987; amended in R85-21(B) at 11 Ill. Reg. 19117, effective November 9, 1987; amended in R86-36, R86-39, R86-40 at 11 Ill. Reg. 20829; effective December 14, 1987; amended in R82-14 and R86-37 at 12 Ill. Reg. 815, effective December 24, 1987; amended in R86-18 at 12 Ill. Reg. 7311, effective April 8, 1988;

amended in R86-10 at 12 Ill. Reg. 7650, effective April 11, 1988; amended in R87-1 at 12 Ill. Reg. 20333 effective November 21, 1988.

NOTE: Capitalization denotes statutory language.

SUBPART A: GENERAL PROVISIONS

Section 215.100 Introduction

a) This Part contains standards and limitations for emissions of organic material from stationary sources.

b) Sources subject to this Part may be subject to the following:

1) Permits required under 35 Ill. Adm. Code 201;

2) Air quality standards under 35 Ill. Adm. Code 243.

c) This Part is divided into Subparts which are grouped as follows:

1) Subpart A: General provisions;

2) Subparts B - J: Emissions from equipment and operations in common to more than one industry;

3) Subparts K - M: Emissions from use of organic material;

4) Subparts N - end: Special rules for various industry groups.

(Source: Added and codified at 7 Ill. Reg. 13601).

Section 215.101 Clean-up and Disposal Operations

Emission of organic material released during clean-up operations and disposal shall be included with other emissions of organic material from the related emission source or air pollution control equipment in determining total emissions.

(Source: Amended at 3 Ill. Reg. 124, effective July 28, 1979)

Section 215.102 Testing Methods

a) The total organic material concentrations in an effluent stream shall be measured by a flame ionization detector, or by other methods approved by the Illinois Environmental Protection Agency (Agency) according to the provisions of 35 Ill. Adm. Code 201.

b) Measurement of Vapor Pressures

1) For a single-component, the actual vapor pressure shall be determined by ASTM (American Society of Testing and

Materials) Method D-2879-83 (Approved 1983), incorporated by reference in Section 215.105, or the vapor pressure may be obtained from a published source such as: Boublík, T., V. Fried and E. Malá, "The Vapor Pressure of Pure Substances," Elsevier Scientific Publishing Co., New York (1973), Perry's Chemical Engineer's Handbook, McGraw-Hill Book Company (1984), CRC Handbook of Chemistry and Physics, Chemical Rubber Publishing Company (1986-1987), Lange's Handbook of Chemistry, John A. Dean, editor, McGraw-Hill Book Company (1985).

- 2) For a mixture, the actual vapor pressure shall be determined by ASTM (American Society of Testing and Materials) Method D-2879-83 (Approved 1983), incorporated by reference in Section 215.105, or the vapor pressure may be taken as either:

- A) If the vapor pressure of the volatile organic liquid is specified in the applicable rule, the lesser of the sum of the actual vapor pressure of each component or each volatile organic material component, as determined in accordance with 215.102(b)(1), weighted by its mole fraction; or
- B) If the vapor pressure of the organic material or volatile organic material is specified in the applicable rule, the sum of the actual vapor pressure of each such component as determined in accordance with 215.102(b)(1) weighted by its mole fraction.

(Source: Amended at 12 Ill. Reg. 7650, effective April 11, 1988)

Section 215.103 Abbreviations and Conversion Factors

- a) The following abbreviations are used in this Part:

bb1	barrels (42 gal)
°C	degrees Celsius or centigrade
cu. in	cubic inches
°F	degrees Fahrenheit
ft	foot
g	gram
g/mole	grams per mole
gal	gallon
hr	hour
in	inch
°K	degrees Kelvin
kCal	kilocalorie
kg	kilogram
kg/hr	kilograms per hour
kPa	kilopascals; one thousand newtons per square meter
l	liter
lb	pound
lbs/hr	pounds per hour
lbs/gal	pounds per gallon
m	meter
Mg	Megagram, metric ton or tonne

min	minute
MJ	megajoules
mm Hg	millimeters of mercury
ml	milliliter
ppm	parts per million
ppmv	parts per million by volume
psi	pounds per square inch
psia	pounds per square inch absolute
psig	pounds per square inch gauge
scm	standard cubic meters
T	English ton

- b) The following conversion factors have been used in this Part:

English	Metric
1 gal	3.785 l
1000 gal	3.785 l or 3.785 cubic meters
1 psia	6.897 kPa (51.71 mm Hg)
2,205 lbs	1 kg
1 bbl	159.0 l
1 cu in	16.39 ml
1 lb/gal	119,800 mg/l
1 T	0.907 mg

(Source: Amended at 12 Ill. Reg. 815, effective December 24, 1987)

Section 215.104 Definitions

The definitions of 35 Ill. Adm. Code 201 and 211 apply to this Part, as well as the definitions contained in this Section, where the definitions contained in this Section are more specific than that found in Parts 201 or 211, it shall take precedence in application of this Part.

"Binders": Organic materials and resins which do not include volatile organic materials.

"Clear Topcoat": The final coating which contains binders, but not opaque pigments, and is specifically formulated to form a transparent or translucent solid protective film.

"Continuous Process": A method of manufacture of polystyrene resin in which the styrene raw material is delivered on a continuous basis to the reactor in which the styrene is polymerized to polystyrene.

"Conventional Soybean Crushing Source": Any hexane extraction soybean crushing equipment that uses direct contact steam for desolventizing and producing toasted soy meals.

"Furniture Coating Application Line": The combination of coating application equipment, flash-off area, spray booths, ovens, conveyors, and other equipment operated in a predetermined sequence for purpose of applying coating materials to wood furniture.

"Heatset": A class of web offset lithography which requires a heated dryer to solidify the printing inks.

"Heavy Liquid": Liquid with a true vapor pressure of less than 0.3 kPa (0.04 psi) at

294.3 K (70°F) established in a standard reference text or as determined by ASTM method D-2879; or which has 0.1 Reid Vapor Pressure as determined by ASTM method D-323; or which when distilled requires a temperature of 421.95K (300°F) or greater to recover 10% of the liquid as determined by ASTM method D-86.

"In Vacuum Service": For the purposes of Subpart Q, Sections 215.430 through 215.438 equipment which is operating at an internal pressure that is at least 5 kPa (0.73 psia) below ambient pressure.

"Light Liquid": Volatile organic material in the liquid state which is not defined as heavy liquid.

"Light Oil": A liquid condensed or absorbed from coke oven gas composed of benzene, toluene, and xylene.

"Material Recovery Section": Any equipment designed to transport and recover styrene monomer and other impurities from other products and by-products in a polystyrene plant, including but not limited to the styrene devolatilizer unit and styrene recovery unit.

"Offset": Use of a blanket cylinder to transfer ink from the plate cylinder to the surface to be printed.

"Opaque Stains": All stains containing pigments not classified as semi-transparent stains including stains, glazes and other opaque material to give character to wood.

"Open-Ended/Valve": Any valve, except pressure relief devices, having one side of the valve in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

"Pigments Coatings": Opaque coatings containing binders and colored pigments which are formulated to conceal the wood surface either as an undercoat or topcoat.

"Polystyrene Plant": Any plant using styrene to manufacture polystyrene resin.

"Polystyrene Resin": A substance consisting of styrene polymer and additives which is manufactured at a polystyrene plant.

"Repair Coatings": Coatings to correct imperfections or damage to furniture surface.

"Repaired": For the purposes of Subpart Q, Sections 215.430 through 215.438 equipment component which is adjusted, or otherwise altered, to eliminate a leak.

"Sealer": Coating containing binders which seals the wood prior to application to subsequent coatings.

"Semi-transparent Stains": Stains containing dyes or semi-transparent pigments which are formulated to enhance wood grain and change the color of the surface but not to conceal the

surface, including, but not limited to, sap stain, toner, non-grain raising stains, pad stain, spatter stain.

"Specialty Soybean Crushing Source": Any hexane extraction soybean crushing equipment using indirect steam heat in flash or vapor desolventizers as the primary method of desolventizing and producing specialty solvent extracted soy flakes, grits or flour.

"Styrene Devolatilizer Unit": Equipment performing the function of separating unreacted styrene monomer and other volatile components from polystyrene in a vacuum devolatilizer.

"Styrene Recovery Unit": Equipment performing the function of separating styrene monomer from other less volatile components of the styrene devolatilizer unit's output. The separated styrene monomer may be reused as raw material in the polystyrene plant.

"Mash Coat": Coating containing binders which seals wood surfaces, prevents undesired staining and controls penetration.

"Web": A substrate which is printed in continuous roll-fed presses.

"Wood Furniture": Room furnishings including cabinets (kitchen, bath and vanity), tables, chairs, beds, sofas, shutters, art objects, wood paneling, wood flooring, and any other coated furnishings made of wood, wood composition or fabricated wood materials.

(Source: Amended at 12 Ill. Reg. 815, effective December 24, 1987)

Section 215.105. Incorporations by Reference

The following materials are incorporated by reference:

a) American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA. 19103:

- 1) ASTM D 1644-59 Method A
- 2) ASTM D 1475-60
- 3) ASTM D 2369-73
- 4) ASTM D 2879-83 (Approved 1983)
- 5) ASTM D 323-82 (Approved 1982)
- 6) ASTM D 86-82 (Approved 1982)
- 7) ASTM E 260-73 (Approved 1973), E 168-67 (Reapproved 1977), E 169-63 (Reapproved 1981), E 20 (Approved 1985)
- 8) ASTM D 97-66
- 9) ASTM D-1946-67
- 10) ASTM D-2382-76

b) Federal Standard 141a, Method 4082.1

c) National Fire Codes, National Fire Prevention Association, Battery March Park, Quincy, Massachusetts 02269 (1979)

d) United States Environmental Protection Agency, Washington, D.C., EPA-450/2-77-026, Appendix A.

e) United States Environmental Protection Agency, Washington, D.C., EPA-450/2-78-051 Appendix A and Appendix B (December 1978).

f) Standard Industrial Classification Manual, published by Executive Office of the President, Office of Management and Budget, Washington, D.C., 1972.

g) 40 CFR 60, Appendix A, 1986

h) United States Environmental Protection Agency, Washington D.C., EPA-450/2-78-041.

(Board Note: The incorporations by reference listed above contain no later amendments or editions.)

(Source: Amended at 12 III. Reg. 7650, effective April 11, 1988)

Section 215.106 Afterburners

The operation of any oil fired or natural gas fired afterburner and capture system used to comply with this Part or any section thereof is not required during the period of November 1 of any year to April 1 of the following year provided that:

a) The operation of such devices is not required for purposes of occupational safety or health, or for the control of toxic substances, odor nuisances or other regulated pollutants; and

b) Such devices are operated for the duration of any period for which an ozone advisory, alert or emergency has been declared pursuant to 35 III. Adm. Code 244.

(Source: Amended at 3 III. Reg. 30, p. 124, effective July 28, 1979)

Section 215.107 Determination of Applicability

a) In determining the applicability of regulations in this Part which are qualified by "when averaged over the preceding three calendar years" the "preceding three calendar years" shall mean:

1) The three years preceding the date by which compliance is required for purposes of determining initial applicability to existing sources;

2) Any consecutive three year period for purposes of determining applicability to sources not previously subject to the regulation on the date by which compliance is required.

b) Sources to which the regulation has been applicable at any time shall continue to be subject to the applicable limitations even if operations change so as to result in an average which is below that which initially made the regulation applicable to those sources' operations.

(Source: Added in RBS-21(A) at 11 III. Reg. 11770, effective June 29, 1987.

SUBPART B: ORGANIC EMISSIONS FROM STORAGE AND LOADING OPERATIONS

Section 215.121 Storage Containers

No person shall cause or allow the storage of any volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3 K (70°F) or any gaseous organic material in any stationary tank, reservoir or other container of more than 151 cubic meters (40,000 gal) capacity unless such tank, reservoir or other container:

a) Is a pressure tank capable of withstanding the vapor pressure of such liquid or the pressure of the gas, so as to prevent vapor or gas loss to the atmosphere at all times, or,

b) Is designed and equipped with one of the following vapor loss control devices:

1) A floating roof which rests on the surface of the volatile organic liquid and is equipped with a closure seal or seals between the roof edge and the tank wall. Such floating roof shall not be permitted if the volatile organic liquid has a vapor pressure of 86.19 kPa (12.5 psia) or greater at 294.3 K (70°F). No person shall cause or allow the emission of air contaminants into the atmosphere from any gauging or sampling devices attached to such tanks, except during sampling or maintenance operations.

2) A vapor recovery system consisting of:

A) A vapor gathering system capable of collecting 85% or more of the uncontrolled volatile organic material that would be otherwise emitted to the atmosphere; and,

B) A vapor disposal system capable of processing such volatile organic material so as to prevent its emission to the atmosphere. No person shall cause or allow the emission of air contaminants into the atmosphere from any gauging or sampling devices attached to such tank, reservoir or other container except during sampling.

3) Other equipment or means of equal efficiency approved by the Agency according to the provisions of 35 III. Adm. Code 201.

(Source: Amended at 12 Ill. Reg. 815, effective December 24, 1987)

Section 215.122 Loading Operations

a) No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere during the loading of any organic material from the aggregate loading pipes of any loading facility having through-put of greater than 151 cubic meters per day (40,000 gal/day) into any railroad tank car, tank truck or trailer unless such loading facility is equipped with submerged loading pipes or a device that is equally effective in controlling emissions and is approved by the Agency according to the provisions of 35 Ill. Adm. Code 201.

b) No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Agency according to the provisions of 35 Ill. Adm. Code 201, or unless such tank is a pressure tank as described in Section 215.121(a) or is fitted with a recovery system as described in Section 215.121(b)(2).

c) Exception: If no odor nuisance exists the limitations of this Section shall only apply to the loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).

(Source: Amended at 12 Ill. Reg. 815, effective December 24, 1987)

Section 215.123 Petroleum Liquid Storage Tanks

a) The requirements of subsection (b) shall not apply to any stationary storage tank:

- 1) Equipped before January 1, 1979 with one of the vapor loss control devices specified in Section 215.121(b), except Section 215.121(b)(1);
- 2) With a capacity of less than 151.42 cubic meters;
- 3) With a capacity of less than 1,600 cubic meters (422,400 gallons) and used to store produced crude oil and condensate prior to custody transfer;
- 4) With a capacity of less than 1,430 cubic meters (378,000 gallons) and used to store produced oil or condensate in crude oil gathering;
- 5) Subject to new source performance standards for storage vessels of petroleum liquid, 35 Ill. Adm. Code 230;
- 6) In which volatile petroleum liquid is not stored; or

7) Which is a pressure tank as described in Section 215.121(a).

b) Subject to subsection (a) no owner or operator of a stationary storage tank shall cause or allow the storage of any volatile petroleum liquid in the tank unless:

1) The tank is equipped with one of the vapor loss control devices specified in Section 215.121(b);

2) There are no visible holes, tears or other defects in the seal or any seal fabric or material of any floating roof;

3) All openings of any floating roof deck, except stub drains, are equipped with covers, lids or seals such that:

A) The cover, lid or seal is in the closed position at all times except when petroleum liquid is transferred to or from the tank;

B) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and

C) Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting;

4) Routine inspections of floating roof seals are conducted through roof hatches once every six months;

5) A complete inspection of the cover and seal of any floating roof tank is made whenever the tank is emptied for reasons other than the transfer of petroleum liquid during the normal operation of the tank, or whenever repairs are made as a result of any semi-annual inspection or incidence of roof damage or defect; and

6) A record of the results of each inspection conducted under subsection (b)(4) or (b)(5) is maintained.

c) Owners and operators of petroleum liquid storage tanks were required to have compliance schedules as summarized in Appendix C.

(Source: Amended at 3 Ill. Reg. 124, effective July 28, 1979)

Section 215.124 External Floating Roofs

a) In addition to meeting the requirements of Section 215.123(b), no owner or operator of a stationary storage tank equipped with an external floating roof shall cause or allow the storage of any volatile petroleum liquid in the tank unless:

1) The tank has been fitted with a continuous secondary seal extending from

the floating roof to the tank wall (rim mounted secondary seal) or any other device which controls volatile organic material emissions with an effectiveness equal to or greater than a rim-mounted secondary seal;

- 2) Each seal closure device meets the following requirements:

- A) The seal is intact and uniformly in place around the circumference of the floating roof between the floating roof and tank wall; and
- B) The accumulated area of gaps exceeding 0.32 centimeter (1/8 inch) in width between the secondary seal and the tank wall shall not exceed 21.2 square centimeters per meter of tank diameter (1.0 square inches per foot of tank diameter), as determined by methods or procedures approved by the Agency;

- 3) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers across at least 90 percent of the area of the opening;

- 4) Openings are equipped with projections into the tank which remain below the liquid surface at all times;

- 5) Inspections are conducted prior to May 1 of each year to insure compliance with Section 215.124(a);

- 6) The secondary seal gap is measured prior to May 1 of each year in accordance with methods or procedures approved by the Agency;

- 7) Records of the types of volatile petroleum liquid stored, the maximum true vapor pressure of the liquid as stored, the results of the inspections and the results of the secondary seal gap measurements are maintained and available to the Agency, upon verbal or written request, at any reasonable time for a minimum of two years after the date on which the record was made;

- 8) Upon a reasonable request by the Agency, the owner or operator of a volatile organic material source required to comply with Section 215.124(a), at his own expense, demonstrates compliance by methods or procedures approved by the Agency; and

- 9) A person planning to conduct a volatile organic material emission test to demonstrate compliance with Sections 215.123 and 215.124 notifies the Agency of that intent not less than 30 days before the planned initiation of the tests so the Agency may observe the test.

- b) The requirements of subsection (a) shall not apply to any stationary storage tank equipped with an external floating roof:

- 1) Exempted under Section 215.123(a)(2) through (a)(6);
- 2) Of welded construction equipped with a metallic-type shoe seal having a secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal);
- 3) Of welded construction equipped with a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted liquid-filled-type seal, or other closure device of equivalent control efficiency approved by the Agency in which a petroleum liquid with a true vapor pressure less than 27.6 kPa (4.0 psia) at 294.3°K (70°F) is stored; or
- 4) Used to store crude oil.

(Source: Amended at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.125 Compliance Dates and Geographical Areas

- a) Except as otherwise stated in subsection (b), every owner or operator of an emission source subject to Section 215.123 or 215.124 shall comply with its standards and limitations by December 31, 1981.

- b) If an emission source is not located in one of the counties listed below and is also not located in any county contiguous thereto, the owner or operator of the emission source shall comply with the requirements of Sections 215.123 and 215.124 no later than December 31, 1987:

Cook	Macoupin
DuPage	Madison
Kane	Monroe
Lake	Saint Clair

(Board Note: These counties are proposed to be designated as nonattainment by the United States Environmental Protection Agency at 47 Fed. Reg. 31588, July 21, 1982.)

- c) Notwithstanding subsection (b), if any county is designated as nonattainment by the United States Environmental Protection Agency (USEPA) at any time subsequent to the effective date of this Section, the owner or operator of an emission source located in that county or any county contiguous to that county who would otherwise be subject to the compliance date in subsection (b) shall comply with the requirements of Sections 215.123 and 215.124 within one year from the date of redesignation but in no case later than December 31, 1987.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.126 Compliance Plan

- a) The owner or operator of an emission source subject to Section 215.125(a) shall submit to the Agency a compliance plan as required by 35 Ill. Adm. Code 201.241, including a project completion schedule where applicable, no later than April 21, 1983.
- b) The owner or operator of an emission source subject to Section 215.125(b) shall submit to the Agency a compliance plan, including a project completion schedule where applicable, no later than December 31, 1986.
- c) The owner or operator of an emission source subject to Section 215.125(c) shall submit a compliance plan, including a project completion schedule within 90 days after the date of redesignation, but in no case later than December 31, 1986.
- d) Unless the submitted compliance plan or schedule is disapproved by the Agency, the owner or operator of a facility or emission source subject to the rules specified in subsection (a), (b) or (c) may operate the emission source according to the plan and schedule as submitted.
- e) The plan and schedule shall meet the requirements of 35 Ill. Adm. Code 201.241, including specific interim dates as required in 35 Ill. Adm. Code 201.242.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

SUBPART C: ORGANIC EMISSIONS FROM MISCELLANEOUS EQUIPMENT

Section 215.141 Separation Operations

- a) No person shall use any single or multiple compartment effluent water separator which receives effluent water containing 757 l/day (200 gal/day) or more of organic material from any equipment processing, refining, treating, storing or handling organic material unless such effluent water separator is equipped with air pollution control equipment capable of reducing by 85 percent or more the uncontrolled organic material emitted to the atmosphere. Exception: If no odor nuisance exists the limitations of this subsection shall not apply if the vapor pressure of the organic material is below 17.24 kPa (2.5 psia) at 294.3°K (70°F).
- b) Subsection (a) shall not apply to water and crude oil separation in the production of Illinois crude oil, if the vapor pressure of such crude oil is less than 34.5 kPa (5 psia).

(Source: Amended at 12 Ill. Reg. 815, effective December 24, 1987)

Section 215.142 Pumps and Compressors

No person shall cause or allow the discharge of more than 32.8 ml (2 cu in) of volatile organic liquid with vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F) into the atmosphere from any pump or compressor in any 15 minute period at standard conditions.

(Source: Amended at 12 Ill. Reg. 815, effective December 24, 1987)

Section 215.143 Vapor Blowdown

No person shall cause or allow the emission of organic material into the atmosphere from any vapor blowdown system or any safety relief valve, except such safety relief valves not capable of causing an excessive release, unless such emission is controlled:

- a) To 10 ppm equivalent methane (molecular weight 16.0) or less; or,
- b) By combustion in a smokeless flare; or,
- c) By other air pollution control equipment approved by the Agency according to the provisions of 35 Ill. Adm. Code 201.

Section 215.144 Safety Relief Valves

Section 215.143 shall not apply to any set of unregulated safety relief valves capable of causing excessive releases, provided the owner or operator thereof, by October 1, 1972, provides the Agency with the following:

- a) A historical record of each such set (or, if such records are unavailable, of similar sets which, by virtue of operation under similar circumstances, may reasonably be presumed to have the same or greater frequency of excessive releases) for a three-year period immediately preceding October 1, 1972, indicating:
 - 1) Dates on which excessive releases occurred from each such set; and,
 - 2) Duration in minutes of each such excessive release; and,
 - 3) Quantities (in pounds) of mercaptans and/or hydrogen sulfide emitted into the atmosphere during each such excessive release.
- b) Proof, using such three-year historical records, that no excessive release is likely to occur from any such set either alone or in combination with such excessive releases from other sets owned or operated by the same person and located within a ten-mile radius from the center point of any such set, more

frequently than 3 times in any 12 month period; and.

- c) Accurate maintenance records pursuant to the requirements of subsection (a); and,
- d) Proof, at three-year intervals, using such three-year historical records, that such set conforms to the requirements of subsection (c).

(Source: Amended at 3 Ill. Reg. 124, effective July 28, 1979)

SUBPART E: SOLVENT CLEANING

Section 215.181 Solvent Cleaning in General

The requirements of Sections 215.182 through 215.184 shall not apply:

- a) To sources whose emissions of volatile organic material do not exceed 6.8 kg (15 lbs) in any one day, nor 1.4 kg (3 lbs) in any one hour; or
- b) To sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance, provided that:

- 1) The operation of the sources is not an integral part of the production process;
- 2) The emissions from the source do not exceed 363 kg (800 lbs) in any calendar month; and,
- 3) The exemption is approved in writing by the Agency.

(Source: Amended at 3 Ill. Reg. 124, effective July 28, 1979)

Section 215.182 Cold Cleaning

a) Operating Procedures: No person shall operate a cold cleaning degreaser unless:

- 1) Waste solvent is stored in covered containers only and not disposed of in such a manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;
- 2) The cover of the degreaser is closed when parts are not being handled; and
- 3) Parts are drained until dripping ceases.

b) Equipment Requirements: No person shall operate a cold cleaning degreaser unless:

- 1) The degreaser is equipped with a cover which is closed whenever parts are not being handled in the cleaner. The cover shall be designed to be easily operated with one hand or with the mechanical assistance of springs, counter-weights or a powered system if:

A) The solvent vapor pressure is greater than 2 kPa (15 mmHg or 0.3 psi) measured at 38°C (100°F);

B) The solvent is agitated; or

C) The solvent is heated above ambient room temperature.

2) The degreaser is equipped with a facility for draining cleaned parts. The drainage facility shall be constructed so that parts are enclosed under the cover while draining unless:

A) The solvent vapor pressure is less than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F); or

B) An internal drainage facility cannot be fitted into the cleaning system, in which case the drainage facility may be external.

3) The degreaser is equipped with one of the following control devices if the vapor pressure of the solvent is greater than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F) or if the solvent is heated above 50°C (120°F) or its boiling point:

A) A freeboard height of 7/10 of the inside width of the tank or 91 cm (36 in), whichever is less; or

B) Any other equipment or system of equivalent emission control as approved by the Agency. Such a system may include a water cover, refrigerated chiller or carbon adsorber.

4) A permanent conspicuous label summarizing the operating procedure is affixed to the degreaser; and

5) If a solvent spray is used, the degreaser is equipped with a solid fluid stream spray, rather than a fine, atomized or shower spray.

Section 215.183 Open-Top Vapor Degreasing

a) Operating Requirements: No person shall operate an open-top vapor degreaser unless:

1) The cover of the degreaser is closed when workloads are not being processed through the degreaser;

2) Solvent carryout emissions are minimized by:

A) Racking parts to allow complete drainage;

B) Moving parts in and out of the degreaser at less than 3.3 m/min (11 ft/min);

C) Holding the parts in the vapor zone until condensation ceases;

- D) Tipping out any pools of solvent on the cleaned parts before removal from the vapor zone; and,
- E) Allowing parts to dry within the degreaser until visually dry.
- 3) Porous or absorbent materials, such as cloth, leather, wood or rope are not degreased;
- 4) Less than half of the degreaser's open top area is occupied with a workload;
- 5) The degreaser is not loaded to the point where the vapor level would drop more than 10 cm (4 in) when the workload is removed from the vapor zone;
- 6) Spraying is done below the vapor level only;
- 7) Solvent leaks are repaired immediately;
- 8) Waste solvent is stored in covered containers only and not disposed of in such a manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;
- 9) Water is not visually detectable in solvent exiting from the water separator; and
- 10) Exhaust ventilation exceeding 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) of degreaser open area is not used, unless necessary to meet the requirements of the Occupational Safety and Health Act (29 U.S.C. Section 651 et seq.).
- b) Equipment Requirements: No person shall operate an open top vapor degreaser unless:
 - 1) The degreaser is equipped with a cover designed to open and close easily without disturbing the vapor zone;
 - 2) The degreaser is equipped with the following switches:
 - A) A device which shuts off the sump heat source if the amount of condenser coolant is not sufficient to maintain the designed vapor level; and
 - B) A device which shuts off the spray pump if the vapor level drops more than 10 cm (4 in) below the bottom condenser coil; and
 - C) A device which shuts off the sump heat source when the vapor level exceeds the design level.
 - 3) A permanent conspicuous label summarizing the operating procedure is affixed to the degreaser;

4) The degreaser is equipped with one of the following devices:

- A) A freeboard height of 3/4 of the inside width of the degreaser tank or 91 cm (36 in); whichever is less; and if the degreaser opening is greater than 1 square meter (10.8 square feet), a powered or mechanically assisted cover; or
- B) Any other equipment or system of equivalent emission control as approved by the Agency. Such equipment or system may include a refrigerated chiller, an enclosed design or a carbon adsorption system.

(Source: Amended at 3 [1], Reg. 124, effective July 28, 1979)

Section 215.184 Conveyorized Degreasing

a) Operating Requirements: No person shall operate a conveyorized degreaser unless:

- 1) Exhaust ventilation exceeding 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) of area of loading and unloading opening is not used, unless necessary to meet the requirements of the Occupational Safety and Health Act (29 U.S.C. Section 651 et seq.).
- 2) Solvent carryout emissions are minimized by:
 - A) Racking parts for best drainage; and
 - B) Maintaining the vertical conveyor speed at less than 3.3 m/min (11 ft/min);
- 3) Waste solvent is stored in covered containers only and not disposed of in such a manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;
- 4) Solvent leaks are repaired immediately;
- 5) Water is not visually detectable in solvent exiting from the water separator; and
- 6) Downtime covers are placed over entrances and exits of conveyorized degreasers immediately after the conveyors and exhausts are shut down and not removed until just before start-up.
- b) Equipment Requirements: No person shall operate a conveyorized degreaser unless:
 - 1) The degreaser is equipped with a drying tunnel, rotating (tumbling) basket or other equipment sufficient to prevent cleaned parts from carrying out solvent liquid or vapor;

- 2) The degreaser is equipped with the following switches:
 - A) A device which shuts off the sump heat source if the amount of condenser coolant is not sufficient to maintain the designed vapor level;
 - B) A device which shuts off the spray pump or the conveyor if the vapor level drops more than 10 cm (4 in) below the bottom condenser coil; and
 - C) A device which shuts off the sump heat source when the vapor level exceeds the design level;
- 3) The degreaser is equipped with openings for entrances and exits that silhouette workloads so that the average clearance between the parts and the edge of the degreaser opening is less than 10 cm (4 in) or less than 10 percent of the width of the opening;
- 4) The degreaser is equipped with downtime covers for closing off entrances and exits when the degreaser is shut down; and
- 5) The degreaser is equipped with one of the following control devices, if the air/vapor interface is larger than 2.0 square meters (21.6 square feet):
 - A) A carbon adsorption system with ventilation greater than or equal to 15 cubic meters per minute per square meter (50 cubic feet per minute per square foot) of air/vapor area when downtime covers are open, and exhausting less than 25 ppm of solvent by volume averaged over a complete adsorption cycle; or
 - B) Any other equipment or system of equivalent emission control as approved by the Agency. Such equipment or system may include a refrigerated chiller.

(Source: Amended at 3 Ill. Reg. 124, effective July 28, 1979)

Section 215.185 Compliance Plan

- a) Solvent cleaning and degreasing were subject to certain compliance dates which are summarized in Appendix C. Compliance programs were required under 35 Ill. Adm. Code 201, Subpart H.
- b) Cold cleaning degreasers were not required to submit a compliance plan or project completion schedule under 35 Ill. Adm. Code 201, Subpart H.

(Source: Amended at 3 Ill. Reg. 124, effective July 28, 1979)

SUBPART F: COATING OPERATIONS

Section 215.202 Compliance Schedules

Owners or operators of coating lines were required to take certain actions to achieve compliance which are set forth in Appendix C.

(Source: Amended at 3 Ill. Reg. 124, effective July 28, 1979)

Section 215.204 Emission Limitations for Manufacturing Plants

No owner or operator of a coating line shall cause or allow the emission of volatile organic material to exceed the following limitations on coating materials, excluding water and any compounds which are specifically exempted from the definition of volatile organic material pursuant to this Part, delivered to the coating applicator:

a) Automobile or Light Duty Truck Manufacturing Plants

1) In Cook County	kg/l	lb/gal
Prime coat	0.14	(1.2)
Prime surfacer coat	0.34	(2.8)

(Board Note: The prime surfacer coat limitation is based upon a transfer efficiency of 30 percent. The prime surfacer coat limitation shall not apply until December 31, 1982.)

	kg/l	lb/gal
Top coat	0.34	(2.8)

(Board Note: The limitation is based upon a transfer efficiency of 30 percent. The topcoat limitation shall not apply until December 31, 1985.)

	kg/l	lb/gal
Final repair coat	0.58	(4.8)

(Board Note: The limitation shall not apply until December 31, 1985.)

2) In Boone County	kg/l	lb/gal
Prime coat	0.14	(1.2)
Prime surfacer coat	0.34	(2.8)
Top coat	0.34	(2.8)

(Board Note: The top coat limitation shall not apply if, by December 31, 1984 a limitation of 0.43 kg/l (3.6 lb/gal) is achieved and the top coat is applied with a transfer efficiency of not less than 55 percent and by December 31, 1986, the top coat is applied with a transfer efficiency of not less than 65 percent.)

	kg/l	lb/gal
Final repair coat	0.58	(4.8)

3) In the remaining counties	kg/l	lb/gal
Prime coat	0.14	(1.2)
Prime surfacer coat	0.34	(2.8)
Top coat	0.34	(2.8)
Final repair coat	0.58	(4.8)

b) Can Coating kg/l lb/gal

1) Sheet basecoat and overvarnish	0.34	(2.8)
2) Exterior basecoat and over-varnish	0.34	(2.8)
3) Interior body spray coat	0.51	(4.2)
4) Exterior end coat	0.51	(4.2)
5) Side seam spray coat	0.66	(5.5)
6) End sealing compound coat	0.44	(3.7)

c) Paper Coating kg/l lb/gal

1) All paper coating except as provided in subsection (c)(2)	0.35	(2.9)
2) Specialty High Gloss Catalyzed Coating	0.42	(3.5)

(Board Note: These limitations shall not apply to equipment used for both printing and paper coating.)

d) Coil Coating	kg/l	lb/gal
	0.31	(2.6)
e) Fabric Coating	0.35	(2.9)
f) Vinyl Coating	0.45	(3.8)
g) Metal Furniture Coating	0.36	(3.0)
h) Large Appliance Coating	0.34	(2.8)

(Board Note: The limitation shall not apply to the use of quick-drying lacquers for repair of scratches and nicks that occur during assembly, provided that the volume of coating does not exceed 0.95 liters (1 quart) in any one eight-hour period.)

1) Magnet Wire Coating	kg/l	lb/gal
	0.20	(1.7)

j) Miscellaneous Metal Parts and Products Coating kg/l lb/gal

1) Clear coating	0.52	(4.3)
2) Air dried coating	0.42	(3.5)
3) Extreme performance coating	0.42	(3.5)

4) Power driven fastener coating

a) Nail coating Refer to limits in (1)(1), (2), (3) and (5)

b) Staple, brad and finish nail unit fabrication bonding coating 0.64 (5.3)

c) Staple, brad and finish nail incremental fabrication lubricity coating 0.64 (5.3)

d) Staple, brad and finish nail incremental fabrication withdrawal resistance coating 0.60 (5.0)

e) Staple, brad and finish nail unit fabrication coating 0.64 (5.3)

5) All other coatings 0.36 (3.0)

(Board Note: The least restrictive limitation shall apply if more than one limitation pertains to a specific coating.)

k) Heavy Off-Highway Vehicle Products

1) In Cook, DuPage, Kane, Lake, Macoupin, Madison, McHenry, Monroe, St. Clair and Will Counties

Extreme performance prime coat kg/l lb/gal 0.42 (3.5)

Extreme performance top coat air dried 0.42 (3.5)

Final repair coat-air dried 0.42 (3.5)

High-temperature aluminum coating used at existing diesel-electric locomotive manufacturing plants 0.72 (6.0)

2) In the remaining counties kg/l lb/gal

Extreme performance prime coat 0.42 (3.5)

Extreme performance top coat-air dried 0.52 (4.3)

Final repair coat-air dried 0.58 (4.8)

1) Wood Furniture Coating

	kg/l	lb/gal
1) Clear topcoat	0.67	(5.6)
2) Opaque stain	0.56	(4.7)
3) Pigmented coat	0.60	(5.0)
4) Repair coat	0.67	(5.6)
5) Sealer	0.67	(5.6)
6) Semi-transparent stain	0.79	(6.6)
7) Wash coat	0.73	(6.1)

(Board Note: The repair coat has overall transfer efficiency of 30 percent; all others have an overall transfer efficiency of 65 percent.)

m) Existing Diesel-Electric Locomotive Coating Lines in Cook County

	kg/l	lb/gal
1) Extreme performance prime coat	0.42	(3.5)
2) Extreme performance top coat-air dried	0.52	(4.3)
3) Final repair coat-air dried	0.58	(4.8)
4) High-temperature aluminum coating	0.72	(6.0)
5) All other coatings	0.36	(3.0)

(Source: Amended at 12 Ill. Reg. 7650, effective April 11, 1988)

Section 215.205 Alternative Emission Limitations

Owners or operators of coating lines subject to Section 215.204 may comply with this Section, rather than with Section 215.204. The methods or procedures used to determine emissions of organic material under this Section shall be approved by the Agency. Emissions of volatile organic material from sources subject to Section 215.204, are allowable, notwithstanding the limitations in Section 215.204, if:

- a) For those sources subject to Section 215.204(b), the emissions are controlled by an afterburner system which provides:
- 1) 75% reduction in the overall emissions of volatile organic material from the coating line, and
 - 2) Oxidation to carbon dioxide and water of 90% of the nonmethane volatile organic material (measured as total combustible carbon) which enters the afterburner.

b) For all other sources subject to Section 215.204, the emissions are controlled by an afterburner system which provides:

- 1) 81% reduction in the overall emissions of volatile organic material from the coating line, and
- 2) Oxidation to carbon dioxide and water of 90% of the nonmethane volatile organic material (measured as total combustible carbon) which enters the afterburner.

c) The system used to control such emission is demonstrated to have control efficiency equivalent to or greater than that provided under the applicable provision of Section 215.204 or subsections (a) or (b).

(Source: Amended at 12 Ill. Reg. 815, effective December 24, 1987)

Section 215.206 Exemptions from Emission Limitations

a) The limitations of this Subpart shall not apply to:

- 1) Coating plants whose emissions of volatile organic material as limited by the operating permit will not exceed 22.7 Mg/year (25 T/year), in the absence of air pollution control equipment; or
- 2) Sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance provided that:

A) The operation of the source is not an integral part of the production process;

B) The emissions from the source do not exceed 363 kg (800 lbs) in any calendar month; and

C) The exemption is approved in writing by the Agency.

- 3) Interior body spray coating material for three-piece steel cans used by National Can Corporation at its Rockford can manufacturing plant in Loves Park, Illinois, provided that:

A) The emission of volatile organic material from the interior body spray coating line shall not exceed 0.70 kg/l (5.8 lb/gal) of coating material, excluding water, delivered to the coating applicator; and

B) The emission of volatile organic material shall comply with the provisions of Section 215.204 by use of the internal offset provisions of Section 215.202 computed on a weekly weighted average basis.

b) The limitations of Section 215.204(j) shall not apply to the Waukegan, Illinois, facilities of the Outboard Marine Corporation, so long as the emissions of volatile organic material related to the surface coating of miscellaneous metal parts and products at those facilities do not exceed 35 tons per year.

c) Notwithstanding the limitations of Section 215.204(k)(2), the John Deere Harvester-Moline Works of Deere and Company, Moline, Illinois, shall not cause or permit the emission of volatile organic material from its existing green and yellow flocoating operations to exceed a weekly average of 6.2 lb/gal.

(Source: Amended 12 Ill. Reg. 20133, effective November 21, 1988)

Section 215.207 Compliance by Aggregation of Emission Sources

a) Owners or operators of coating lines subject to Section 215.204 may comply with this Section rather than with Section 215.204. The methods or procedures used to determine emissions of volatile organic material under this Section shall be approved by the Agency in accordance with 35 Ill. Adm. Code 201. Emissions of volatile organic material from sources subject to Section 215.204 are allowable, notwithstanding the limitations in Section 215.204, if the combined actual emissions from selected coating lines at the coating plant, but not including coating lines or other emission sources constructed or modified after July 1, 1979, is less than or equal to the combined allowable emissions as determined by the following equations:

$$E_{ALL} = \sum_{j=1}^m \sum_{i=1}^n (A_i B_i)$$

$$E_{ACT} = \sum_{j=1}^m \sum_{i=1}^n (C_i B_i D_i)$$

b) A_i shall be determined by the following formula:

$$A_i = \frac{R_i}{1 - R_i S_i}$$

c) As used in subsection (a) and (b), symbols mean the following:

E_{ALL} = the allowable volatile organic material emissions from the coating plant in kg/day (lb/day)

A_i = the allowable emission limit for a coating pursuant to Section 215.204 expressed in kg/l (lbs/gal) of coating solids.

B_i = the volume of coating solids in l/day (gal/day), in a coating as delivered to the coating line.

m = the number of coating lines included in the combined emission rate.

n = the number of different coatings delivered to a coating line.

E_{ACT} = the actual volatile organic material emissions from the coating plant in kg/day (lbs/day).

C_i = the weight of volatile organic material per volume of solids in kg/l (lb/gal) for a coating.

D_i = the control efficiency by which emissions of volatile organic material from a coating are reduced through the use of control equipment.

R_i = the applicable volatile organic material emission limit pursuant to Section 215.204, for a coating, in kg/l (lb/gal).

S_i = the density of the volatile organic material in a coating in kg/l (lb/gal).

d) The owner or operator of the coating plant shall maintain records of the density of the volatile organic material in each coating, the quantity and volatile organic material and solids content of each coating applied and the line to which coating is applied, in such a manner so as to demonstrate continuing compliance with the combined allowable emissions.

e) Except for emission sources subject to Section 215.301 or 215.302, credits from emission sources at the coating plant that are subject to this Part, other than coating lines, may be given, to the extent that emissions are reduced from the allowable emission limits for such emission sources contained in either this Part, or any existing operating permit, whichever limit is less.

(Source: Amended at 12 Ill. Reg. 815, effective December 24, 1987)

Section 215.208 Testing Methods for Solvent Content

a) The following methods of analyzing the solvent content of coatings, as revised from time to time, or any other equivalent procedure approved by the Agency, shall be used as applicable:

1) ASTM D 1644-59 Method A

2) ASTM D 1475-60

3) ASTM D 2369-73

4) Federal Standard 141a, Method 4082.1

- b) Transfer efficiency shall be determined by a method, procedure or standard approved by the USEPA, under the applicable new source performance standard or until such time as USEPA has approved and published such a method, procedure or standard, by any appropriate method, procedure or standard approved by the Agency.

(Source: Amended at 3 ILL. Reg. 124, effective July 28, 1979)

Section 215.209 Exemption from General Rule on Use of Organic Material

No coating line subject to the limitations of Section 215.204 is required to meet Section 215.301 or 215.302 after the date by which the coating line is required to meet Section 215.204.

(Source: Amended at 3 ILL. Reg. 124, effective July 28, 1979)

Section 215.210 Alternative Compliance Schedule

The owner or operator of coating lines subject to Section 215.204(k)(2) may in lieu of compliance with Section 215.211 demonstrate compliance through the use of a low solvent coating technology by taking the following actions:

- a) Submit to the Agency a compliance plan, including a project completion schedule, that meets the requirements of 35 ILL. Adm. Code 201.241 on or before August 19, 1983; and
- b) Meet the following increments of progress:
 - 1) Submit to the Agency by July 1, 1984 and every six months thereafter a report describing in detail the progress made in the development, application testing, product quality, customer acceptance and United States Food and Drug Administration or government agency approval of the low solvent coating technology;
 - 2) Initiate process modifications to allow the use of low solvent coatings as soon as coatings meeting Board requirements become commercially available for production use; and
 - 3) Achieve final compliance as expeditiously as possible but no later than December 31, 1986.

(Source: Amended at 7 ILL. Reg. 1244, effective January 21, 1983)

Section 215.211 Compliance Dates and Geographical Areas

- a) Except as otherwise stated in subsection (b), every owner or operator of an emission source subject to Section 215.204(j), (k)(1) and (m)

shall comply with those sections in accordance with the following dates:

- 1) For Section 215.204(j) and (k)(2) Extreme performance prime coat and final repair coat-air dried, by December 31, 1983.
- 2) For Section 215.204(k)(1) and (m), by December 31, 1987.
- 3) For Section 215.204(k)(2) Extreme performance top coat-air dried, in accordance with Section 215.210.
- 4) For Section 215.204(l), by December 31, 1985.

- b) If an emission source is not located in one of the nonattainment counties or counties contiguous to nonattainment counties listed below, the owner or operator of the emission source shall comply with the requirements of Section 215.204(j), (k) or (l) no later than December 31, 1987:

Bond	Madison
Clinton	McHenry
Cook	Monroe
DeKalb	Montgomery
DuPage	Morgan
Franklin	Pope
Greene	Randolph
Jackson	Saline
Jersey	Sangamon
Johnson	St. Clair
Kane	Union
Kenidall	Washington
Lake	Will
Macoupin	Williamson

(Board note: Counties are designated as attainment or nonattainment for ozone by the United States Environmental Protection Agency (USEPA). The USEPA noted in its redesignation rulemaking that it will publish a rulemaking notice on Williamson County's attainment status. (45 Fed. Reg. 21949, May 16, 1981.) Should Williamson County be redesignated as attainment prior to October 31, 1985, it and the counties contiguous to it will be considered deleted from the above list.)

- c) Notwithstanding subsection (b), if any county is designated as nonattainment by the USEPA at any time subsequent to the effective date of this rule, the owner or operator of an emission source located in that county or any county contiguous to that county who would otherwise be subject to the compliance date in subsection (b) shall comply with the requirements of Section 215.204(j), (k) or (l) within one year from the date of redesignation but in no case later than December 31, 1987.

(Source: Amended at 11 ILL. Reg. 20829, effective December 14, 1987)

Section 215.212 Compliance Plan

- a) The owner or operator of an emission source subject to Section 215.211(a)(1) or (3) shall submit to the Agency a compliance plan on or before August 19, 1983.
- b) The owner or operator of an emission source subject to Section 215.211(a)(4) shall submit to the Agency a compliance plan on or before October 31, 1985.
- c) The owner or operator of an emission source subject to Section 215.211(b) shall submit to the Agency a compliance plan no later than December 31, 1986.
- d) The owner or operator of an emission source subject to Section 215.211(c) shall submit a compliance plan within 90 days after the date of redesignation, but in no case later than December 31, 1986.
- e) The owner or operator of an emission source subject to Section 215.211(c) shall not be required to submit a compliance plan if redesignation occurs after December 31, 1986.
- f) The plan and schedule shall meet the requirements of 35 Ill. Adm. Code 201.

(Source: Amended at 11 Ill. Reg. 20829, effective December 14, 1987)

Section 215.213 Special Requirements for Compliance Plan

For sources subject to Sections 215.204 through 215.209, an approvable compliance plan shall include:

- a) A complete description of each coating line which is subject to an emission limitation in Sections 215.204 through 215.209;
- b) Quantification of the allowable emissions from the coating plant determined under Section 215.207 where applicable; and
- c) A description of the procedures and methods used to determine the emissions of volatile organic material including a method of inventory, recordkeeping and emission calculation or measurement which will be used to demonstrate compliance with the allowable plantwide emission limitation.

(Source: Adopted at 3 Ill. Reg. 124, effective July 28, 1979)

SUBPART H: SPECIAL LIMITATIONS FOR SOURCES IN MAJOR URBANIZED AREAS WHICH ARE NONATTAINMENT FOR OZONE

Section 215.240 Applicability

Notwithstanding any other limitations or exceptions in this Part 215, the special requirements of this Subpart shall apply to the

affected sources in the following Counties: Cook, DuPage, Kane, Lake, Macoupin, Madison, McHenry, Monroe, St. Clair, and Will.

(Source: Added in R85-21(A) at 11 Ill. Reg. 11770, effective June 29, 1987)

Section 215.241 External Floating Roofs

The requirements of Subsection 215.124(a) shall not apply to any stationary storage tank equipped with an external floating roof:

- a) Exempted under Section 215.123(a)(2) through (a)(6);
- b) Of welded construction equipped with a metallic-type shoe seal having a secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal);
- c) Of welded construction equipped with a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted liquid-filled-type seal, or other closure device of equivalent control efficiency approved by the Agency in which a petroleum liquid with a true vapor pressure less than 27.6 kPa (4.0 psia) at 294.3°K (70°F) is stored; or
- d) Used to store crude oil with a pour point of 50°F or higher as determined by ASTM Standard D97-66.

(Source: Added in R85-21(A) at 11 Ill. Reg. 11770, effective June 29, 1987)

Section 215.245 Flexographic and Rotogravure Printing

- a) The limitations of Subpart P shall apply unless the facility's aggregate uncontrolled rotogravure and/or flexographic printing press emissions of volatile organic material are limited by operating permit conditions to 90.7 Mg (100 tons) per year or less in the absence of air pollution control equipment or whose actual emissions in the absence of air pollution control equipment would be less than or equal to 90.7 Mg (100 tons) per year when averaged over the preceding three calendar years.
- b) If an owner or operator of a packaging rotogravure printing press proposes to comply with the limitations of Section 215.401 pursuant to subsection (d) of that Section, then the combined capture and control system must provide an overall reduction in volatile organic material emissions of at least 65 percent.

(Source: Added at 11 Ill. Reg. 19117, effective November 9, 1987)

Section 215.249 Compliance Dates

Sources subject to this Subpart H shall comply with the applicable limitations within one year

of the effective date of the subpart or by December 31, 1987, whichever is sooner.

(Source: Added in 285-21(A) at 11 Ill. Reg. 11770, effective June 29, 1987.)

SUBPART I: ADJUSTED RACT EMISSIONS LIMITATIONS

Section 215.260 Applicability

Owners and operators of emission sources subject to Subparts PP, QQ, or RR may petition the Illinois Pollution Control Board for an Adjusted Reasonably Available Control Technology (RACT) Emissions Limitation for such emission sources. Owners and operators of emissions sources which are in existence on the effective date of this Subpart shall submit to the Illinois Pollution Control Board a Notice of Intent to Petition for an Adjusted RACT Emissions Limitation within 60 days after the effective date of this Subpart. Petitions for an Adjusted RACT Emissions Limitation shall be filed within 120 days after the effective date of this Subpart or at the time a construction permit is applied for from the Agency for the emission source, or 60 days after the time an emission source meets the applicability criteria set forth in such Subparts. For the purposes of this Subpart, uncontrolled volatile organic material emissions are the emissions of volatile organic material which would result if no air pollution control equipment were used.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

Section 215.261 Petition

A petition for an Adjusted RACT Emission Limitation shall contain:

- a) A specific proposal of, and support for, an Adjusted RACT Emissions Limitation which would apply to the emission source that is the subject of the petition as well as a showing at a hearing held pursuant to Section 28.1 of the Environmental Protection Act (Act) that the application of the applicable limits of Section 215.926(a)(1) and (2), 215.946(a)(1) or 215.966(a)(1) would be technically infeasible or economically unreasonable for that emission source.
- b) Information on the technical feasibility of reducing emissions of volatile organic material from the emission source including, but not limited to:
 - 1) A complete description of the operations of the emission source.
 - 2) A discussion of all available compliance strategies for achieving the emissions reduction prescribed by the applicable section and the technical feasibility of each compliance strategy.
 - 3) Comparisons of the nature and quantity of uncontrolled emissions to:

A) Emissions reductions which would be achieved pursuant to the applicable Section for each compliance strategy listed in Section 215.261(b)(2); and

B) Emissions reduction which would be achieved pursuant to the proposed Adjusted RACT Emissions Limitation.

- 4) The basis for determining that the proposed method of emissions reduction is RACT for that emission source and all information supporting that determination.
- c) Information on the economic reasonableness of reducing emissions of volatile organic material from the emission source including, but not limited to:

- 1) A comparison of the relative costs of achieving the emissions reduction pursuant to Section 215.926(a)(1) and (2), 215.946(a)(1) or 215.966(a)(1) and pursuant to the proposed Adjusted RACT Emissions Limitation including for each compliance strategy:

A) Capital costs;

B) Operating costs;

C) Any economic benefits, such as material recovery; and

D) Other costs and benefits.

- 2) An evaluation of the cost effectiveness in terms of annualized net cost per ton of volatile organic material reduction for each compliance strategy. Volatile organic material reduction is the amount of uncontrolled volatile organic material emissions less the amount of volatile organic material emissions after controls.

- 3) An evaluation of the effects of the cost of achieving emissions reduction in relation to:

A) The annualized capital and operating budgets of the emission source over the most recent five-year period; and

B) Such other costs and economic information as the petitioner believes may assist the Board in reaching a decision.

- 4) A discussion of other factors the petitioner may consider relevant such as:

A) Age of facility;

B) Quantity of emissions;

C) Nature of emissions;

D) Severity of existing air quality problems;

E) Extent of controls present;

F) Comparability to standard industry practice in related industries;

G) Cross media impacts; or

H) Potential for operational modifications

- 5) The basis for determining that the proposed method of emissions reduction is RACT for the emission source and all information supporting that determination.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

Section 215.263 Public Hearing

In a public hearing before the Board noticed and held pursuant to the requirements of Section 28.1 of the Act, the petitioner for an Adjusted RACT Emissions Limitation shall prove:

- a) That the emissions limitation prescribed pursuant to Section 215.926(a)(1) and (2), 215.946(a)(1) or 215.966(a)(1) does not constitute RACT for the specific emission source; and
- b) That compliance with the proposed Adjusted RACT Emissions Limitation:
 - 1) Is RACT for that emission source based on the information provided in the petition and at the hearing addressing subjects described in Sections 215.261 and
 - 2) Will not cause or contribute to an increase in emissions so as to prevent or interfere with the State's attainment of the air quality standards set forth in 35 Ill. Adm. Code 243.123 and 243.125.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

Section 215.264 Board Action

The Board shall issue and maintain opinions and orders pursuant to the requirements of Section 28.1 of the Act. In addition, the Board shall publish a list of its determinations in accordance with Section 28.1 of the Act. If an owner or operator of an emission source meets the requirements of Sections 215.261 and 215.263 the Board may establish an Adjusted RACT Emissions Limitation. Such Adjusted RACT Emissions Limitation:

- a) Shall substitute for that limitation otherwise prescribed by Section 215.926(a)(1) and (2), 215.946(a)(1) or 215.966(a)(1) and
- b) Shall require compliance by a date certain as established by the Board for an existing source or prior to the operation of a new emission source.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

Section 215.267 Agency Petition

The Agency may petition the Board for an Adjusted RACT Emissions Limitation for an emission source subject to this Subpart at any time after the effective date of this Subpart. The provisions of Sections 215.261, 215.263, and 215.264 shall apply to such petitions.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

SUBPART K: USE OF ORGANIC MATERIAL

Section 215.301 Use of Organic Material

No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in Sections 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material.

(Source: Amended at 3 Ill. Reg. 124, effective July 28, 1979)

Section 215.302 Alternative Standard

Emissions of organic material in excess of those permitted by Section 215.301 are allowable if such emissions are controlled by one of the following methods:

- a) Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water; or,
- b) A vapor recovery system which adsorbs and/or condenses at least 85 percent of the total uncontrolled organic material that would otherwise be emitted to the atmosphere; or,
- c) Any other air pollution control equipment approved by the Agency capable of reducing by 85 percent or more the uncontrolled organic material that would be otherwise emitted to the atmosphere.

(Source: Amended at 3 Ill. Reg. 124, effective July 28, 1979)

Section 215.303 Fuel Combustion Emission Sources

The provisions of Sections 215.301 and 215.302 shall not apply to fuel combustion emission sources.

(Source: Amended at 3 Ill. Reg. 124, effective July 28, 1979)

Section 215.304 Operations with Compliance Program

The provisions of Sections 215.301 and 215.302 shall not apply to any owner, operator, user or manufacturer of paint, varnish, lacquer, coatings or printing ink whose compliance program and project completion schedule, as required by 35 Ill. Adm. Code 201, provides for the reduction of organic material used in such process to 20 percent or less of total volume by May 30, 1977.

(Source: Amended at 3 Ill. Reg. 124, effective July 28, 1979)

Section 215.305 Viscose Exemption (Repealed)

(Source: Repealed at 9 Ill. Reg. 13960, effective August 28, 1985)

SUBPART N: VEGETABLE OIL PROCESSING

Section 215.340 Hexane Extraction Soybean Crushing

The owner or operator of a hexane extraction soybean crushing source, which would emit volatile organic material in excess of 100 tons per year in the absence of pollution control equipment or enforceable operating permit limitation, shall not cause or allow emissions to exceed:

- a) 0.0026 lbs of volatile organic material per pound of conventional soybean crush, and
- b) 0.0052 lbs of volatile organic material per pound of specialty soybean crush.

(Source: Adopted at 8 Ill. Reg. 13254, effective July 12, 1984)

Section 215.342 Hexane Extraction Corn Oil Processing

The owner or operator of a hexane extraction corn oil source, which would emit volatile organic material in excess of 100 tons per year in the absence of control equipment or enforceable operating permit limitation, shall not cause or allow emissions to exceed more than 2.2 gals. of volatile organic material per ton of raw corn germ processed.

(Source: Adopted at 8 Ill. Reg. 13254, effective July 12, 1984)

Section 215.344 Recordkeeping for Vegetable Oil Processes

- a) The owner or operator of sources subject to Section 215.340 and 215.342 shall maintain daily records of solvent storage inventory, and conventional and specialty soybean crush or raw corn germ. Each day the total decrease in solvent storage inventory, and total conventional and specialty soybean

crush or raw corn germ for the previous 180 days shall be calculated.

- b) The Agency shall have access to records required under this Section upon reasonable notice.

(Source: Adopted at 8 Ill. Reg. 13254, effective July 12, 1984)

Section 215.345 Compliance Determination

- a) Each day, the owner or operator of sources subject to Section 215.340 shall calculate the sum of:
 - 1) total conventional soybean crush for the previous 180 days, in pounds, multiplied by 0.0026, plus
 - 2) total specialty soybean crush for the previous 180 days, in pounds, multiplied by 0.0052.
- b) Each day, the owner or operator of sources subject to Section 215.342 shall calculate the sum of the total raw corn germ processed for the previous 180 days, in tons multiplied by 2.2.
- c) If such sum is less than the total decrease in solvent storage inventory over the previous 180 days, then the provisions of Section 215.340 or 215.342, whichever is applicable, shall be deemed to have been exceeded.

(Source: Adopted at 8 Ill. Reg. 13254, effective July 12, 1984)

Section 215.346 Compliance Dates and Geographical Areas

- a) Except as otherwise stated in subsection (b), every owner or operator of an emission source subject to Sections 215.340 through 215.345 shall comply with the standards and limitations of those Sections by December 31, 1985.
- b) If an emission source is not located in one of the counties listed below, the owner or operator of the emission source shall comply with the requirements of Sections 215.340 through 215.345 no later than December 31, 1987:

Bond	Madison
Clinton	McHenry
Cook	Monroe
DeKalb	Montgomery
DuPage	Morgan
Franklin	Pope
Greene	Randolph
Jackson	Saline
Jersey	Sangamon
Johnson	St. Clair
Kane	Union
Kendall	Washington
Lake	Will
Macoupin	Williamson

(Board note: The USEPA noted in its redesignation rulemaking, that it will publish a rulemaking notice on Williamson County's attainment status. (45 Fed. Reg. 21949; May 16, 1983). Should Williamson County be redesignated as attainment prior to December 31, 1984, it and the counties contiguous to it will be considered deleted from the above list.

- c) Notwithstanding subsection (b), if any county is redesignated as nonattainment by the USEPA at any time subsequent to the effective date of this Section, the owner or operator of an emission source located in that county or any county contiguous to that county who would otherwise be subject to the compliance date in subsection (b) shall comply with the requirements of Sections 215.340 through 215.345 within one year from the date of redesignation but in no case later than December 31, 1987.

(Source: Adopted at 8 Ill. Reg. 13254, effective July 12, 1984)

Section 215.347 Compliance Plan

- a) The owner or operator of an emission source subject to Section 215.346(a) or (b) shall submit to the Agency a compliance plan, no later than December 31, 1984.
- b) The owner or operator of an emission source subject to Section 215.346(c) shall submit a compliance plan within 90 days after the date of redesignation, but in no case later than December 31, 1986.
- c) The owner or operator of an emission source subject to Section 215.346(c) shall not be required to submit a compliance plan if redesignation occurs after December 31, 1986.
- d) The plan and schedule shall meet the requirements of 35 Ill. Adm. Code 201, Subpart H, including specific interim dates as required in 35 Ill. Adm. Code 201.242.

(Source: Adopted at 8 Ill. Reg. 13254, effective July 12, 1984)

SUBPART P: PRINTING AND PUBLISHING

Section 215.401 Flexographic and Rotogravure Printing

No owner or operator of a packaging rotogravure, publication rotogravure or flexographic printing press subject to this rule and employing solvent-containing ink may cause or allow the operation of such press unless:

- a) The volatile fraction of ink as it is applied to the substrate contains 25 percent or less by volume of organic solvent and 75 percent or more by volume of water; or

- b) The volatile fraction of an ink as it is applied to the substrate, less water, is 40 percent or less by volume; or

- c) The owner or operator installs and operates:

- 1) A carbon adsorption system which reduces the volatile organic emissions from the capture system by at least 90 percent by weight; or
- 2) An afterburning system which oxidizes at least 90 percent of the captured nonmethane volatile organic materials (measured as total combustible carbon) to carbon dioxide and water; or
- 3) An alternative volatile organic material emission reduction system demonstrated to have at least a 90 percent overall reduction efficiency and approved by the Agency; and

- d) A capture system is used in conjunction with any of the emission control systems in subsection (c). The design and operation of the capture system must be consistent with good engineering practice and shall provide, in combination with the control equipment, an overall reduction in volatile organic material emissions of at least:

- 1) 75 percent where a publication rotogravure process is employed; or
- 2) 65 percent or the maximum reduction achievable using good engineering design where a packaging rotogravure process is employed; or
- 3) 60 percent where a flexographic printing process is employed.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.402 Exemptions

The limitations of this Subpart shall not apply to any facility whose aggregate uncontrolled rotogravure and/or flexographic printing press emissions of volatile organic material are limited by operating permit conditions to 907 Mg (1000 tons) per year or less in the absence of air pollution control equipment or whose actual emissions in the absence of air pollution control equipment would be less than or equal to 907 Mg (1000 tons) per year when averaged over the preceding three calendar years.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.403 Applicability of Subpart K

Upon achieving compliance with this Subpart, the emission source is not required to meet Subpart K. Emission sources exempted from this Subpart

are subject to Subpart K. Rotogravure or flexographic equipment used for both roll printing and paper coating are subject to this Subpart.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.404 Testing and Monitoring

- a) Upon a reasonable request of the Agency, the owner or operator of a volatile organic material source subject to this Subpart shall at his own expense demonstrate compliance by methods or procedures approved by the Agency.
- b) A person planning to conduct a volatile organic material emissions test to demonstrate compliance with this Subpart shall notify the Agency of that intent not less than 30 days before the planned initiation of the tests so the Agency may observe the test.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.405 Compliance Dates and Geographical Areas

- a) Except as otherwise stated in subsection (b), every owner or operator of an emission source subject to:

- 1) Section 215.401 shall comply with its standards and limitations by December 31, 1983; and
- 2) Section 215.408 shall comply with its standards and limitations by December 31, 1987.

- b) If an emission source subject to Section 215.401 is not located in one of the counties listed below and is also not located in any county contiguous thereto, the owner or operator of the emission source shall comply with the requirements of this Subpart no later than December 31, 1987:

Cook	Macoupin
DuPage	Madison
Kane	Monroe
Lake	Saint Clair

- c) Notwithstanding subsection (b), if any county is designated as nonattainment by the USEPA at any time subsequent to the effective date of this Subpart, the owner or operator of an emission source located in that county or any county contiguous to that county who would otherwise be subject to the compliance date in subsection (b) shall comply with the requirements of this Subpart within one year from the date of redesignation but in no case later than December 31, 1987.

(Source: Adopted at 11 Ill. Reg. 16706, effective September 30, 1987)

Section 215.406 Alternative Compliance Plan

The owner or operator of an emission source subject to this Subpart may, in lieu of compliance with Sections 215.405 and 215.407 demonstrate compliance through the use of a low solvent ink program by taking the following actions:

- a) Submit to the Agency a compliance plan, including a compliance completion schedule, by December 31, 1983 which demonstrates:
 - 1) Substantial emission reductions early in the compliance schedule;
 - 2) Greater reductions in emissions than would have occurred without a low solvent ink program; and
 - 3) Final compliance as expeditiously as possible but no later than December 31, 1987; and
- b) Certify to the Agency that:

- 1) A low solvent ink compliance strategy is not technically available which would enable the emission source to achieve compliance by the date specified in Section 215.405; and
- 2) An unreasonable economic burden would be incurred if the owner or operator were required to demonstrate compliance by the date specified in Section 215.405; and

- c) Agree to install one of the control alternatives specified in Section 215.401(c) by June 31, 1986 if the specified low-solvent ink strategy fails to achieve scheduled reductions by December 31, 1985.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.407 Compliance Plan

- a) The owner or operator of an emission source subject to Section 215.405(a)(1) shall submit to the Agency a compliance plan, pursuant to 35 Ill. Adm. Code 201, Subpart H, including a project completion schedule where applicable, no later than April 21, 1983.
- b) The owner or operator of an emission source subject to Section 215.405(b) shall submit to the Agency a compliance plan, including a project completion schedule where applicable, no later than December 31, 1986.
- c) The owner or operator of an emission source subject to Section 215.405(c) shall submit a compliance plan, including a project completion schedule within 90 days after the date of redesignation, but in no case later than December 31, 1986.
- d) Unless the submitted compliance plan or schedule is disapproved by the Agency, the

owner or operator of a facility or emission source subject to the rules specified in subsection (a), (b) or (c) may operate the emission source according to the plan and schedule as submitted.

- e) The plan and schedule shall meet the requirements of 35 Ill. Adm. Code 201, Subpart H, including specific interim dates as required in 35 Ill. Adm. Code 201.242.

(Source: Adopted at 11 Ill. Reg. 16706, effective September 30, 1987)

Section 215.408 Heatset Web Offset Lithographic Printing

- a) No owner or operator of a heatset web offset lithographic printing facility, located in Cook, DuPage, Kane, Lake, Macoupin, Madison, McHenry, Monroe, St. Clair or Will County, emitting over 100 tons/year of organic material, in the absence of pollution control equipment, may cause or allow the operation of a heatset web offset press unless:

- 1) An incinerator system is installed and operated that oxidizes at least 90 percent of the organic materials (measured as total combustible carbon) in the dryer exhaust airstream to carbon dioxide and water; or
- 2) The fountain solution contains no more than eight (8) percent, by weight, of volatile organic material and a condensation recovery system is installed and operated that removes at least 75 percent of the non-isopropyl alcohol organic materials from the dryer exhaust airstream.

- b) No owner or operator of a heatset web offset lithographic printing facility, located in a county other than Cook, DuPage, Kane, Lake, Macoupin, Madison, McHenry, Monroe, St. Clair or Will County, emitting over 100 tons/year of organic material, in the absence of pollution control equipment, may cause or allow the operation of a heatset web offset press unless the fountain solution contains no more than eight (8) percent, by weight, of volatile organic material.

(Source: Added at 11 Ill. Reg. 16706, effective September 30, 1987)

SUBPART Q: LEAKS FROM SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING EQUIPMENT

Section 215.420 Applicability

The provisions of Sections 215.421 through 215.429 of this subpart shall apply to all plants in the State of Illinois which manufacture synthetic organic chemicals and polymers, except those located in any of the following counties: Will, McHenry, Cook, DuPage, Lake, Kane, Madison, St. Clair, Macoupin, and Monroe. The provisions of Section

215.430 through 215.438 shall apply to the counties specifically enumerated above. In addition, if any county is redesignated as non-attainment by the USEPA subsequent to December 31, 1987, the owner or operator of a plant located in that county shall comply with the requirements of Sections 215.430 through 215.438 upon the effective date of the redesignation.

(Source: Added at 11 Ill. Reg. 20829, effective December 14, 1987)

Section 215.421 General Requirements

The owner or operator of a plant which has more than 1,500 components in gas or light liquid service, which components are used to manufacture the synthetic organic chemicals or polymers listed in Appendix D, shall conduct leak inspection and repair programs in accordance with this Subpart for that equipment containing more than 10 percent volatile organic material as determined by ASTM method E-260, E-168, and E-169, incorporated by reference in Section 215.105. A component shall be considered to be leaking if the volatile organic material concentration exceeds 10,000 ppm when measured at a distance of 0 cm from the component. The provisions of this Subpart are not applicable if the products listed in Appendix D are made from natural fatty acids for the production of hexadecyl alcohol.

(Source: Adopted at 11-111, Reg. 20829, effective December 14, 1987)

Section 215.422 Inspection Program Plan for Leaks

The owner or operator of a synthetic organic chemical or polymer manufacturing plant subject to Section 215.420 shall prepare an inspection program plan which contains at a minimum:

- a) An identification of all components and the period in which each will be monitored pursuant to Section 215.422;
- b) The format for the monitoring log required by Section 215.423;
- c) A description of the monitoring equipment to be used pursuant to Section 215.422; and
- d) A description of the methods to be used to identify all pipeline valves, pressure relief valves in gaseous service, all leaking components, and the ball and plug valves and pumps exempted under Section 215.422(h) such that they are obvious and can be located by both plant personnel performing monitoring and Agency personnel performing inspections.

(Source: Adopted at 9 Ill. Reg. 13960, effective August 28, 1985)

Section 215.423 Inspection Program for Leaks

The owner or operator of a synthetic organic chemical or polymer manufacturing plant subject to Section 215.420 shall, for the purposes of detecting leaks, conduct a component inspection program consistent with the following provisions:

- a) Test annually those components operated near extreme temperature or pressure such that they would be unsafe to routinely monitor, and those components located more than two meters above or away from permanent worker access structures or surfaces;
- b) Test all other pressure relief valves in gaseous service, pump seals, pipeline valves, process drains and compressor seals not earlier than March 1 or later than June 1 of each year;
- c) If more than 2 percent of the components tested pursuant to subsection (b) are found to leak, again test all pressure relief valves in gaseous service, pipeline valves in gaseous service and compressor seals by methods and procedures approved by the Agency not earlier than June 1 or later than September 1 of each year;
- d) Observe visually all pump seals weekly;
- e) Test immediately any pump seal from which liquids are observed dripping;
- f) Test any relief valve within 24 hours after it has vented to the atmosphere; and
- g) Test immediately after repair any component that was found leaking.
- h) Ball and plug valves, inaccessible valves, storage tank valves, pumps equipped with mechanical seals, pressure relief devices connected to an operating flare header or vapor recovery device are exempt from the monitoring requirements in this Section.

(Source: Adopted at 9 Ill. Reg. 13960, effective August 28, 1985)

Section 215.424 Repairing Leaks

All leaking components must be repaired and retested as soon as practicable but no later than 21 days after the leak is found unless the leaking component cannot be repaired until the process unit is shutdown or the repair part is received. Records of repairing and retesting must be maintained in accordance with Sections 215.424 and 215.425.

(Source: Adopted at 9 Ill. Reg. 13960, effective August 28, 1985)

Section 215.425 Recordkeeping for Leaks

- a) The owner or operator of a synthetic organic chemical or polymer manufacturing plant shall maintain a leaking components monitoring log which shall contain, at a minimum, the following information:

- 1) The name of the process unit where the component is located;
- 2) The type of component (e.g., valve, seal);
- 3) The identification number of the component;
- 4) The date on which a leaking component is discovered;
- 5) The date on which a leaking component is repaired;
- 6) The date and instrument reading of the recheck procedure after a leaking component is repaired;
- 7) A record of the calibration of the monitoring instrument;
- 8) The identification number of leaking components which cannot be repaired until process unit shutdown; and
- 9) The total number of components inspected and the total number of components found leaking during that monitoring period.

b) Copies of the monitoring log shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report prepared.

c) Copies of the monitoring log shall be made available to the Agency, upon verbal or written request, at any reasonable time.

(Source: Adopted at 9 Ill. Reg. 13960, effective August 28, 1985)

Section 215.426 Report for Leaks

The owner or operator of a synthetic organic chemical or polymer manufacturing plant subject to Section 215.420 shall:

- a) Submit a report to the Agency prior to the 1st day of July and October listing all leaking components identified pursuant to Section 215.422 but not repaired within 21 days, all leaking components awaiting process unit shutdown, the total number of components inspected and the total number of components found leaking;
- b) Submit a signed statement with the report attesting that all monitoring and repairs were performed as required under Sections 215.420 through 215.425.

(Source: Adopted at 9 Ill. Reg. 13960, effective August 28, 1985)

Section 215.427 Alternative Program for Leaks

The Agency shall approve an alternative program of monitoring, recordkeeping, and/or reporting to that prescribed in Sections 215.420 through 215.425, upon a demonstration by the owner or operator of such plant that the alternative program will provide plant personnel and Agency

personnel with an equivalent ability to identify and repair leaking components. The owner or operator utilizing an alternative monitoring program shall submit to the Agency an alternative monitoring program plan consistent with the provisions of Section 215.421.

(Source: Adopted at 9 III. Reg. 13960, effective August 28, 1985)

Section 215.428 Compliance Dates

- a) Every owner or operator of a synthetic organic chemical or polymer manufacturing plant subject to Sections 215.420 through 215.426 shall comply with the standards and limitations of those Sections beginning December 31, 1987.

(Source: Amended at 11 III. Reg. 20829, effective December 14, 1987)

Section 215.429 Compliance Plan

- a) The owner or operator of a synthetic organic chemical or polymer manufacturing plant subject to Section 215.428 shall submit to the Agency a compliance plan, no later than December 31, 1987.

- b) The plan and schedule shall meet the requirements of 35 III. Adm. Code 201.

(Source: Amended at 11 III. Reg. 20829, effective December 14, 1987)

Section 215.430 General Requirements

The owner or operator of a plant which processes more than 3650 Mg/yr (4031 tons/year) gaseous or light liquid volatile organic material, and whose components are used to manufacture the synthetic organic chemicals or polymers listed in Appendix D, shall conduct leak inspection and repair programs for that equipment in accordance with this Subpart. Leak inspection and repair programs shall be conducted for that equipment containing 10 percent or more by weight volatile organic material as determined by ASTM method E-168, E-169 and E-260, incorporated by reference in Section 215.105. A component shall be considered to be leaking if the volatile organic material is equal to, or is greater than 10,000 ppmv as methane or hexane as determined by USEPA Reference Method 21, as specified at 40 CFR 60, Appendix A, incorporated by reference in Section 215.105, indication of liquids dripping, or indication by a sensor that a seal or barrier fluid system has failed. The provisions of this Subpart are not applicable if the equipment components are used to produce heavy liquid chemicals only from heavy liquid feed or raw materials.

(Source: Added at 11 III. Reg. 20829, effective December 14, 1987)

Section 215.431 Inspection Program Plan for Leaks

The owner or operator of a synthetic organic chemical or polymer manufacturing plant subject to Section 215.430 shall prepare an inspection program plan which contains, at a minimum:

- a) An identification of all components and the period in which each will be monitored pursuant to Section 215.432.
- b) The format for the monitoring log required by Section 215.434.
- c) A description of the monitoring equipment to be used when complying with Section 215.432, and
- d) A description of the methods to be used to identify all pipeline valves, pressure relief valves in gaseous service, all leaking components, and components exempted under Section 215.432(1) such that they are obvious and can be located by both plant personnel performing monitoring and Agency personnel performing inspections.

(Source: Added at 11 III. Reg. 20829, effective December 14, 1987)

Section 215.432 Inspection Program for Leaks

The owner or operator of a synthetic organic chemical or polymer manufacturing plant subject to Section 215.430 through 215.438, shall for the purposes of detecting leaks, conduct a component inspection program utilizing the test methods specified in Reference Method 21, 40 CFR 60, Appendix A (1986), incorporated by reference in Section 215.105, consistent with the following provisions:

- a) Test annually those components operated near extreme temperature or pressure such that they would be unsafe to routinely monitor, and those components located more than two meters above permanent worker access structures or surfaces.
- b) Test quarterly all other pressure relief valves in gas service, pumps in light liquid service, valves in light liquid service and in gas service, and compressors.
- c) If less than or equal to 2 percent of the valves in light liquid service and in gas service tested pursuant to subsection (b) are found not to leak for 5 consecutive quarters, no leak tests shall be required for three consecutive quarters. Thereafter, leak tests shall resume for the next quarter. If that test shows less than or equal to 2 percent of the valves in light liquid service and in gas service are leaking, then no tests are required for the next 3 quarters. If more than 2 percent are leaking, then tests are required for the next 5 quarters.

- d) Observe visually all pump seals weekly.
- e) Test immediately any pump seal from which liquids are observed dripping.
- f) Test any relief valve within 24 hours after it has vented to the atmosphere.
- g) Routine instrument monitoring of valves which are not externally regulated, flanges, and equipment in heavy liquid service, is not required. However, any valve which is not externally regulated, flange, or piece of equipment in heavy liquid service that is found to be leaking on the basis of sight, smell or sound shall be repaired as soon as practicable but no later than 30 days after the leak is found.
- h) Test immediately after repair any component that was found leaking.
- i) Within 1 hour of its detection, a weatherproof, readily visible tag, in bright colors such as red or yellow, bearing an identification number and the date on which the leak was detected must be affixed on the leaking component and remain in place until the leaking component is repaired.
- j) Any component that is in vacuum service, pressure relief devices connected to an operating flare header or vapor recovery devices are exempt from the monitoring requirements in this Section.

(Source: Added at 11 Ill. Reg. 20829, effective December 14, 1987)

Section 215.433 Repairing Leaks

All leaking components must be repaired and retested as soon as practicable but no later than 15 days after the leak is found unless the leaking component cannot be repaired until the process unit is shut down. Records of repairing and retesting must be maintained in accordance with Section 215.434 and Section 215.435.

(Source: Added at 11 Ill. Reg. 20829, effective December 14, 1987)

Section 215.434 Recordkeeping for Leaks

- a) The owner or operator of a synthetic organic chemical or polymer manufacturing plant shall maintain a leaking components monitoring log which shall contain, at a minimum, the following information:
 - 1) The name of the process unit where the component is located;
 - 2) The type of component (e.g., valve, seal);
 - 3) The identification number of the component;
 - 4) The date on which a leaking component is discovered;

- 5) The date on which a leaking component is repaired;
- 6) The date and instrument reading of the recheck procedure after a leaking component is repaired;
- 7) A record of the calibration of the monitoring instrument;
- 8) The identification number of leaking components which cannot be repaired until process unit shutdown; and
- 9) The total number of valves in light liquid service and in gas service inspected; the total number and the percentage of these valves found leaking during the monitoring period.

b) Copies of the monitoring log shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report was prepared.

c) Copies of the monitoring log shall be made available to the Agency upon verbal or written request prior to or at the time of inspection pursuant to Section 4(d) of the Environmental Protection Act (Act) (Ill. Rev. Stat. 1985, ch. 111 1/2, pars. 1001 et seq., at any reasonable time.

(Source: Added at 11 Ill. Reg. 20829, effective December 14, 1987)

Section 215.435 Report for Leaks

The owner or operator of a synthetic organic chemical or polymer manufacturing plant subject to Section 215.430 through 215.438 shall:

- a) Submit quarterly reports to the Agency on or before March 31, June 30, September 30, and December 31 of each year, listing all leaking components identified pursuant to Section 215.432 but not repaired within 15 days, all leaking components awaiting process unit shutdown, the total number of components inspected, the type of components inspected, and the total number of components found leaking, the total number of valves inspected and the number and percentage of valves found leaking.
- b) Submit a signed statement with the report attesting that all monitoring and repairs were performed as required under Section 215.430 through 215.436.

(Source: Added at 11 Ill. Reg. 20829, effective December 14, 1987)

Section 215.436 Alternative Program for Leaks

The Agency shall approve an alternative program of monitoring, recordkeeping, or reporting to that prescribed in Sections 215.430 through 215.438, upon a demonstration by the owner or

operator of such plant that the alternative program will provide plant personnel and Agency personnel with an ability equivalent to the monitoring, recordkeeping or reporting requirements of this Part to identify and repair leaking components. The owner or operator utilizing an alternative monitoring program shall submit to the Agency an alternative monitoring program plan consistent with the provisions of Section 215.431.

(Source: Added at 11 III. Reg. 20829, effective December 14, 1987)

Section 215.437 Open-Ended Valves

- a) Each open-ended valve shall be equipped with a cap, blind flange, plug, or a second valve, except during operations requiring fluid flow through the open-ended valve.
- b) Each open-ended valve equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
- c) Open-ended valves which serve as a sampling connection shall be equipped with a closed purge system or closed vent system such that:
 - 1) Purged process fluid shall be returned to the process line with zero VOC emissions to atmosphere, or
 - 2) Purged process fluid shall be collected and recycled to the process line with zero volatile organic material emissions to atmosphere.

(Source: Added at 11 III. Reg. 20829, effective December 14, 1987)

Section 215.438 Compliance Date

The owner or operator of a synthetic organic chemical or polymer manufacturing plant subject to Sections 215.430 through 215.438 shall comply with the standards and limitations of those Sections no later than December 31, 1987.

(Source: Added at 11 III. Reg. 20829, effective December 14, 1987)

SUBPART R: PETROLEUM REFINING AND RELATED INDUSTRIES; ASPHALT MATERIALS

Section 215.441 Petroleum Refinery Waste Gas Disposal

- a) Except as provided in subsection (b) or (c), no person shall cause or allow the discharge of organic materials in excess of 100 ppm equivalent methane (molecular weight 16.0) into the atmosphere from:
 - 1) Any catalyst regenerator of a petroleum cracking system; or
 - 2) Any petroleum fluid coker; or

- 3) Any other waste gas stream from any petroleum or petrochemical manufacturing process.

b) Exception. Existing sources subject to subsection (a)(3) may, alternatively, at their election, comply with the organic material emission limitations imposed by Section 215.301 or 215.302; provided, however, that there shall be no increase in emissions from such sources above the level of emissions in existence on May 3, 1979.

c) New Sources. Sources subject to subsection (a)(3), construction of which commenced on or after January 1, 1977, may, at their election, comply with the following emission limitations:

- 1) A maximum of eight pounds per hour of organic material; or
- 2) Emission of organic material in excess of the limitation of subsection (c)(1) is allowable if such emissions are controlled by air pollution control methods or equipment approved by the Agency capable of reducing by 85 percent or more the uncontrolled organic material that would otherwise be emitted to the atmosphere.

(Source: Amended at 3 III. Reg. 129, effective July 28, 1979)

Section 215.442 Vacuum Producing Systems

No owner or operator of a petroleum refinery shall cause or allow the operation of any vacuum producing system unless the condensers, hot wells and accumulators of any such system are equipped with vapor loss control equipment including, but not limited to, piping, valves, flame arrestors and hot well covers to vent any volatile organic material with a vapor pressure of 10.34 kPa (1.5 psia) or greater at 294.1°K (70°F) to a heater, fire box, flare, refinery fuel gas system or other equipment or system of equal emission control as approved by the Agency. This Section shall not apply to vacuum producing systems on-lube units.

(Source: Amended at 12 III. Reg. 815, effective December 24, 1987)

Section 215.443 Wastewater (Oil/Water) Separator

No owner or operator of a petroleum refinery shall operate any wastewater (oil/water) separator at a petroleum refinery unless the separator is equipped with air pollution control equipment capable of reducing by 85 percent or more the uncontrolled organic material emitted to the atmosphere. If no odor nuisance exists, the limitation of this Section shall not apply if the vapor pressure of the organic material is below 10.34 kPa (1.5 psia) at 294.1°K (70°F) at all times.

(Source: Amended at 12 IIT. Reg 815, effective December 24, 1987)

Section 215.444 Process Unit Turnarounds

a) No owner or operator of a petroleum refinery shall cause or allow a refinery process unit turnaround except in compliance with an operating procedure as approved by the Agency.

b) Unless a procedure is already on file with the Agency as part of an approved operating permit no later than November 1, 1979, the owner or operator of a petroleum refinery shall submit to the Agency for approval a detailed procedure for reducing emissions of volatile organic material during refinery process unit turnarounds from organic material with a vapor pressure of 10.34 kPa (1.5 psia) or greater at 294.3°K (70°F). The Agency shall not approve the procedure unless it provides for:

1). Depressurization of the refinery process unit or vessel to a flare, refinery fuel gas system or other equipment or system of equal emission control, as approved by the Agency, until the internal pressure from the vessel or unit is less than 5.0 psig before allowing the vessel to be vented to the atmosphere;

2) Recordkeeping of the following items:

A) Each date that a refinery unit or vessel is shut down; and

B) The total estimated quantity of volatile organic material emitted to the atmosphere and the duration of the emission in hours.

(Source: Amended at 12 IIT. Reg. 815, effective December 24, 1987)

Section 215.445 Leaks: General Requirements

The owner or operator of a petroleum refinery shall:

a) Develop a monitoring program plan consistent with the provisions of Section 215.446;

b) Conduct a monitoring program consistent with the provisions of Section 215.447;

c) Record all leaking components which have a volatile organic material concentration exceeding 10,000 ppm consistent with the provisions of Section 215.448;

d) Identify each component consistent with the monitoring program plan submitted pursuant to Section 215.446;

e) Repair and retest the leaking components as soon as possible within 22 days after the leak is found, but no later than June 1 for the purposes of Section 215.447(a)(1), unless

the leaking components cannot be repaired until the unit is shut down for turnaround; and

f) Report to the Agency consistent with the provisions of Section 215.449.

(Source: Amended at 7 IIT. Reg. 1244, effective January 21, 1983)

Section 215.446 Monitoring Program Plan for Leaks

The owner or operator of a petroleum refinery shall prepare a monitoring program plan which contains, at a minimum:

a) An identification of all refinery components and the period in which each will be monitored pursuant to Section 215.447;

b) The format for the monitoring log required by Section 215.448;

c) A description of the monitoring equipment to be used pursuant to Section 215.447; and

d) A description of the methods to be used to identify all pipeline valves, pressure relief valves in gaseous service and all leaking components such that they are obvious to both refinery personnel performing monitoring and Agency personnel performing inspections.

(Source: Amended at 7 IIT. Reg. 1244, effective January 21, 1983)

Section 215.447 Monitoring Program for Leaks

a) The owner or operator of a petroleum refinery subject to Section 215.445 shall, for the purpose of detecting leaks, conduct a component monitoring program consistent with the following provisions:

1) Test all pressure relief valves in gaseous service, pump seals, pipeline valves, process drains and compressor seals by methods and procedures approved by the Agency not earlier than March 1 or later than June 1 of each year;

2) Again test all pressure relief valves in gaseous service, pipeline valves in gaseous service and compressor seals by methods and procedures approved by the Agency not earlier than June 1 or later than August 1 of each year;

3) Observe visually all pump seals weekly;

4) Test immediately any pump seal from which liquids are observed dripping;

5) Test any relief valve within 24 hours after it has vented to the atmosphere; and

6) Test immediately after repair any component that was found leaking.

b) Inaccessible valves, storage tank valves and pressure relief devices connected to an operating flare header or vapor recovery device are exempt from the monitoring requirements in subsection (a).

c) The Agency may require more frequent monitoring than would otherwise be required by subsection (a) for components which are demonstrated to have a history of leaking.

(Source: Amended at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.448 Recordkeeping for Leaks

a) The owner or operator of a petroleum refinery shall maintain a leaking components monitoring log which shall contain, at a minimum, the following information:

- 1) The name of the process unit where the component is located;
- 2) The type of component (e.g., valve, seal);
- 3) The identification number of the component;
- 4) The date on which a leaking component is discovered;
- 5) The date on which a leaking component is repaired;
- 6) The date and instrument reading of the recheck procedure after a leaking component is repaired;
- 7) A record of the calibration of the monitoring instrument;
- 8) The identification number of leaking components which cannot be repaired until turnaround; and
- 9) The total number of components inspected and the total number of components found leaking during that monitoring period.

b) Copies of the monitoring log shall be retained by the owner or operator for a minimum of two years after the date on which the record was made or the report prepared.

c) Copies of the monitoring log shall be made available to the Agency, upon verbal or written request, at any reasonable time.

(Source: Amended at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.449 Reporting for Leaks

The owner or operator of a petroleum refinery shall:

- a) Submit a report to the Agency prior to the 1st day of both July and September, listing all leaking components identified pursuant to Section 215.447 but not repaired within 22

days, all leaking components awaiting unit turnaround, the total number of components inspected and the total number of components found leaking;

- b) Submit a signed statement with the report attesting that all monitoring and repairs were performed as required under Sections 215.445 through 215.448.

(Source: Amended at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.450 Alternative Program for Leaks

The Agency may approve an alternative program of monitoring, recordkeeping, and/or reporting to that prescribed in Sections 215.445 through 215.449, upon a demonstration by the owner or operator of a petroleum refinery that the alternative program will provide refinery and Agency personnel with an equivalent ability to identify and repair leaking components. The owner or operator utilizing an alternative monitoring program shall submit to the Agency an alternative monitoring program plan consistent with the provisions of Section 215.446.

(Source: Amended at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.451 Sealing Device Requirements

Except for safety pressure relief valves, no owner or operator of a petroleum refinery shall install or operate a valve at the end of a pipe or line containing volatile organic materials unless the pipe or line is sealed with a second valve, blind flange, plug, cap or other sealing device. The sealing device may be removed only when a sample is being taken or during maintenance operations.

(Source: Amended at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.452 Compliance Schedule for Leaks

The owner or operator of a petroleum refinery shall adhere to the increments of progress contained in the following schedule:

- a) Submit to the Agency a monitoring program plan consistent with Section 215.446 prior to June 1, 1983.
- b) Submit the first monitoring report pursuant to Section 215.449 to the Agency prior to July 1, 1983.

(Source: Amended at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.453 Compliance Dates and Geographical Areas

- a) Except as otherwise stated in subsection (b), every owner or operator of an emission source subject to Sections 215.445 through 215.451

shall comply with those standards and limitations in accordance with Section 215.452.

- b) If an emission source is not located in one of the counties listed below and is also not located in any county contiguous thereto, the owner or operator of the emission source shall comply with the requirements of Sections 215.445 through 215.451 no later than December 31, 1987:

Cook	Macoupin
DuPage	Madison
Kane	Monroe
Lake	Saint Clair

(Board Note: These counties are proposed to be designated as nonattainment by the USEPA at 47 Fed. Reg. 31588, July 21, 1982.)

- c) Notwithstanding subsection (b), if any county is designated as nonattainment by the USEPA at any time subsequent to the effective date of this Section, the owner or operator of an emission source located in that county or any county contiguous to that county who would otherwise be subject to the compliance date in subsection (b) shall comply with the requirements of Sections 215.445 through 215.451 within one year from the date of redesignation but in no case later than December 31, 1987.

(Source: Amended at 7 Ill. Reg. 1244, effective January 21, 1983)

SUBPART 5: RUBBER AND MISCELLANEOUS PLASTIC PRODUCTS

Section 215.461 Manufacture of Pneumatic Rubber Tires

The owner or operator of an undertread cementing, treadend cementing or bead dipping operation at a pneumatic rubber tire manufacturing facility shall install and operate:

- a) A capture system, with minimum capture efficiency of 65 percent by weight of volatile organic material for treadend cementing or bead dipping operations and a capture system with a minimum capture efficiency of 55.5 percent by weight of volatile organic material for undertread cementing; and
- b) A control device that meets the requirements of one of the following:
 - 1) A carbon adsorption system designed and operated in a manner such that there is at least a 90 percent removal of volatile organic material by weight from the gases ducted to the control device;
 - 2) An afterburning system that oxidizes at least 90 percent of the captured nonmethane volatile organic materials (VOM measured as total combustible carbon) to carbon dioxide and water; and

- 3) An alternative volatile organic material emission reduction system demonstrated to have at least a 90 percent overall reduction efficiency and approved by the Agency.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.462 Green Tire Spraying Operations

The owner or operator of a green tire spraying operation at a pneumatic rubber tire manufacturing facility shall:

- a) Install and operate:
 - 1) A capture system with a minimum capture efficiency of 90 percent by weight of volatile organic material; and
 - 2) A control device that meets the requirements of one of the following:
 - A) A carbon adsorption system designed and operated in a manner such that there is at least 90 percent removal of volatile organic material by weight from the bases ducted to the control device;
 - B) An afterburning system that oxidizes at least 90 percent of the captured nonmethane volatile organic material (measured as total combustible carbon) to carbon dioxide and water; or
 - C) An alternative volatile organic material emission reduction system demonstrated to have at least a 90 percent overall reduction efficiency and approved by the Agency.

- b) Substitute for the normal solvent-based mold release compound water-based sprays containing:

- 1) No more than five percent by volume of volatile organic material as applied for the inside of tires;
- 2) No more than ten percent by volume of volatile organic material as applied for the outside of tires.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.463 Alternative Emission Reduction Systems

In lieu of complying with Section 215.461 or 215.462, the owner or operator of an emission source may utilize an alternative volatile organic emission reduction system, including an alternative production process, which is demonstrated to be equivalent to Section 215.461 or 215.462 on the basis of emissions of volatile organic matter. A treadend cementing operation shall be considered equivalent to Section

215.461 or 215.462 for the purposes of this Section if the total volatile organic emission from such operation is 10 grams or less per tire.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.464 Testing and Monitoring

- a) Upon a request of the Agency, the owner or operator of a volatile organic material source required to comply with Sections 215.461 through 215.464 shall, at his own expense, demonstrate compliance by methods or procedures approved by the Agency.
- b) A person planning to conduct a volatile organic material emission test shall notify the Agency of the intent to test not less than 30 days before the planned initiation of the test so the Agency may at its option observe the test.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.465 Compliance Dates and Geographical Areas

- a) Except as otherwise stated in subsection (b), every owner or operator of an emission source subject to Sections 215.461 through 215.464 shall comply with the standards and limitations of this Part by December 31, 1983.
- b) If an emission source is not located in one of the counties listed below and is also not located in any county contiguous thereto, the owner or operator of the emission source shall comply with the requirements of Sections 215.461 through 215.464 no later than December 31, 1987:

Cook	Macoupin
DuPage	Madison
Kane	Monroe
Lake	Saint Clair

(Board Note: These counties are proposed to be designated as nonattainment by the USEPA at 47 Fed. Reg. 31588, July 21, 1982.)

- c) Notwithstanding subsection (b), if any county is designated as nonattainment by the USEPA at any time subsequent to the effective date of this Section, the owner or operator of an emission source located in that county or any county contiguous to that county who would otherwise be subject to the compliance date in subsection (b) shall comply with the requirements of Sections 215.461 through 215.464 within one year from the date of redesignation but in no case later than December 31, 1987.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.466 Compliance Plan

- a) The owner or operator of an emission source subject to Section 215.465(a) shall submit to the Agency a compliance plan, pursuant to 35 Ill. Adm. Code 201, Subpart H, including a project completion schedule where applicable, no later than April 21, 1983.
- b) The owner or operator of an emission source subject to Section 215.465(b) shall submit to the Agency a compliance plan, including a project completion schedule where applicable, no later than December 31, 1986.
- c) The owner or operator of an emission source subject to Section 215.465(c) shall submit a compliance plan, including a project completion schedule within 90 days after the date of redesignation, but in no case later than December 31, 1986.
- d) Unless the submitted compliance plan or schedule is disapproved by the Agency, the owner or operator of a facility or emission source subject to the rules specified in subsection (a), (b) or (c) may operate the emission source according to the plan and schedule as submitted.
- e) The plan and schedule shall meet the requirements of 35 Ill. Adm. Code 201, Subpart H, including specific interim dates as required in 35 Ill. Adm. Code 201.242.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

(Source: Amended at 12 Ill. Reg. 7650, effective April 11, 1988.)

SUBPART T: PHARMACEUTICAL MANUFACTURING

Section 215.480 Applicability of Subpart T

- a) The rules of this Subpart, except for Sections 215.483 through 215.485, apply to all emission sources of volatile organic material, including but not limited to reactors, distillation units, dryers, storage tanks for volatile organic liquids, equipment for the transfer of volatile organic liquids, filters, crystallizers, washers, laboratory hoods, coating operations, mixing operations and centrifuges used in manufacturing, including packaging, of pharmaceuticals, and emitting more than 6.8 kg/day (15 lbs/day) of volatile organic material and more than 2268 kg/year (2.5 tons/year) of volatile organic material, or, if less than 2.5 tons/year, these sections still apply if emissions from any single source exceed 45.4 kg/day (100 lbs/day).
- b) The following emissions shall be excluded from a determination of what constitutes more

than 2268 kg/year (2.5 tons/year) of VOM for the purposes of subsection (a) above: not more than 4535 kg/year (5.0 tons/year) of volatile organic material from each fluid bed drier or each tunnel drier, and not more than 6803 kg/year (7.5 tons/year) of VOM from each Accelacota. This subsection shall apply only to fluid bed dryers, tunnel dryers and Accelacotas located in Libertyville Township, Lake County, Illinois, and only when such emissions are not vented to air pollution control equipment.

c) Sections 215.483 through 215.485 apply to a plant having one or more emission sources that:

- 1) are used to manufacture pharmaceuticals; and
- 2) emit more than 6.8 kg/day (15 lbs/day) of volatile organic material and more than 2268 kg/year (2.5 tons/year) of volatile organic material, or, if less than 2.5 tons/year, these sections still apply if emissions from one or more sources exceed 45.4 kg/day (100 lbs/day).

d) No person shall violate any condition in a permit when the condition results in exclusion of an emission source from this Part 215, Subpart 7.

(Source: Added at 12 Ill. Reg. 7650, effective April 11, 1988)

Section 215.481 Control of Reactors, Distillation Units, Crystallizers, Centrifuges and Vacuum Dryers

a) The owner or operator shall equip all reactors distillation units, crystallizers, centrifuges and vacuum dryers that are used to manufacture pharmaceuticals with surface condensers operated such that the condenser outlet gas temperature does not exceed:

- 1) 248.2°K (-13°F) when condensing volatile organic material of vapor pressure greater than 40.0 kPa (5.8 psi) at 294.3°K (70°F); or
- 2) 258.2°K (5°F) when condensing volatile organic materials of vapor pressure greater than 20.0 kPa (2.9 psi) at 294.3°K (70°F); or
- 3) 273.2°K (12°F) when condensing volatile organic material of vapor pressure greater than 10.0 kPa (1.5 psi) at 294.3°K (70°F); or
- 4) 283.2°K (50°F) when condensing volatile organic material of vapor pressure greater than 7.0 kPa (1.0 psi) at 294.3°K (70°F); or
- 5) 298.2°K (77°F) when condensing volatile organic material of vapor pressure greater than 3.45 kPa (0.5 psi) at 294.3°K (70°F).

b) The owner or operator shall enclose all centrifuges used to manufacture pharmaceuticals and that have an exposed volatile organic liquid surface, where the volatile organic material in the volatile organic liquid has a vapor pressure of 3.45 kPa (0.5 psi) or more at 294.3°K (70°F).

(Source: Added at 12 Ill. Reg. 7650, effective April 11, 1988)

Section 215.482 Control of Air Dryers, Production Equipment Exhaust Systems and Filters

a) The owner or operator of an air dryer or production equipment exhaust system used to manufacture pharmaceuticals shall control the emissions of volatile organic material from such emission sources by air pollution control equipment which reduces by 90 percent or more the volatile organic material that would otherwise be emitted into the atmosphere.

b) The owner or operator shall enclose all rotary vacuum filters and other filters used to manufacture pharmaceuticals and that have an exposed volatile organic liquid surface, where the volatile organic material in the volatile organic liquid has a vapor pressure of 3.45 kPa (0.5 psi) or more at 294.3°K (70°F).

(Source: Added at 12 Ill. Reg. 7650, effective April 11, 1988)

Section 215.483 Material Storage and Transfer

The owner or operator of a pharmaceutical manufacturing plant shall:

- a) Provide a vapor balance system or equivalent control system that is at least 90.0 percent effective in reducing volatile organic material emissions from truck or railcar deliveries to storage tanks with capacities equal to or greater than 7.57m³ (2,000 gallons) that store volatile organic liquids with vapor pressures greater than 28.0 kPa (4.1 psi) at 294.3°K (70°F); and
- b) Install pressure/vacuum conservation vents set at 0.2 kPa (0.03 psi) on all storage tanks that store volatile organic liquids with vapor pressures greater than 10 kPa (1.5 psi) at 294.3°K (70°F), unless a control system that allows less VOM to be emitted is used.

(Source: Added at 12 Ill. Reg. 7650, effective April 11, 1988)

Section 215.484 In-Process Tanks

The owner or operator shall install covers on all in-process tanks used to manufacture pharmaceuticals and containing a volatile organic liquid at any time. These covers must remain closed, except when production, sampling,

maintenance, or inspection procedures require operator access.

(Source: Added at 12 III. Reg. 7650, effective April 11, 1988)

Section 215.485 Leaks

The owner or operator of a pharmaceutical manufacturing plant shall repair any component from which a leak of volatile organic liquid can be observed. The repair shall be completed as soon as practicable but no later than 15 days after the leak is found. If the leaking component cannot be repaired until the process unit is shut down, the leaking component must then be repaired before the unit is restarted.

(Source: Added at 12 III. Reg. 7650, effective April 11, 1988)

Section 215.486 Other Emission Sources

The owner or operator of a washer, laboratory hood, capsule coating operation, mixing operation, or any other process emission source not subject to Section 215.481 through 215.485 of this Subpart, and used to manufacture pharmaceuticals shall control the emissions of volatile organic material from such emission sources by:

- a) Air pollution control equipment which reduces by 81 percent or more the volatile organic material that would otherwise be emitted to the atmosphere, or
- b) A surface condenser which captures all the volatile organic material which would otherwise be emitted to the atmosphere and which meets the requirements of Section 215.481(a) of this Subpart.

(Source: Added at 12 III. Reg. 7650, effective April 11, 1988)

Section 215.487 Testing

- a) The owner or operator of any volatile organic material emission source subject to this Subpart shall, at his own expense, demonstrate compliance to the Agency by methods or procedures listed in Section 215.487(c).
- b) All tests pursuant to Section 215.487(a) shall be performed in conformance with the procedures set forth in 35 III. Adm. Code 283.
- c) Test procedures to determine operation and maintenance compliance with this Subpart shall be consistent with EPA-450/2-78-041, incorporated by reference in Section 215.105. Procedures for testing air pollution control equipment to determine compliance with this Subpart shall use Part 230, Appendix A Method 25 (40 CFR 60, Appendix A Method 25).

(Source: Added at 12 III. Reg. 7650, effective April 11, 1988)

Section 215.488 Monitors for Air Pollution Control Equipment

a) At a minimum, continuous monitors for the following parameters shall be installed on air pollution control equipment subject to this Subpart:

- 1) Destruction device combustion temperature;
- 2) Temperature rise across a catalytic afterburner bed;
- 3) Breakthrough of volatile organic material on a carbon adsorption unit.

b) Each monitor shall be equipped with a recording device.

c) Each monitor shall be calibrated quarterly.

d) Each monitor shall operate at all times while the associated control equipment is operating.

(Source: Added at 12 III. Reg. 7650, effective April 11, 1988)

Section 215.489 Compliance Schedule

- a) The owner or operator of an emission source subject to this Subpart, the construction or modification of which has commenced prior to April 15, 1988, must complete on-site construction or installation of the emission control or process equipment, or both, so as to operate in compliance with this Subpart by April 1, 1989.
- b) The owner and operator of any emission source subject to this Subpart, the construction or modification of which has not commenced prior to April 15, 1988, shall construct such source so that it will operate in compliance with this Subpart.

(Source: Added at 12 III. Reg. 7650, effective April 11, 1988)

SUBPART U: COKE MANUFACTURE AND BY-PRODUCT RECOVERY

Section 215.500 Exceptions

The provisions of Subpart K shall not apply to coke by-product recovery plants.

(Source: Adopted at 9 III. Reg. 13960, effective August 28, 1985)

Section 215.510 Coke By-Product Plants

The owner or operator of a coke by-product recovery plant shall reduce the uncontrolled emissions of volatile organic materials by at

least 85 percent from the following sources, as defined:

- a) Tar decanter, which is a rectangular vessel used to separate tar and flushing liquor by means of gravity;
- b) Light oil sump, which receives wastewater from process equipment from the light oil recovery portion of a coke-by-product recovery plant;
- c) Light oil condensor/separator, which is a device used to condense or separate light oil from which the non-condensable constituents are vented; and
- d) Tar condensate sump, which receives water condensate streams from the tar recovery process equipment.

(Source: Adopted at 9 III. Reg. 13960, effective August 28, 1985)

Section 215.512 Coke By-Product Recovery Plant Leaks

- a) The owner or operator of a coke by-product recovery plant shall conduct a visual inspection program designed to detect, identify, and facilitate repair of leaks from components in light oil liquid service. Components servicing coke oven gas lines, operating flare headers or vapor recovery devices (including pressure relief devices) are exempt from the inspection program.
- b) In conducting such a program, the owner or operator of a coke by-product recovery plant shall:
 - 1) Develop and conduct a weekly inspection program consistent with the provisions of Section 215.513.
 - 2) Record all visible leaking components in light oil liquid service and identify each component observed leaking consistent with the provisions of Section 215.513.
 - 3) Repair the leaking components as soon as practicable, but no later than 21 days after the leak is discovered unless the leaking component cannot be repaired until the unit is shut down or until parts needed to correct the leak are available.

(Source: Adopted at 9 III. Reg. 13960, effective August 28, 1985).

Section 215.513 Inspection Program

The owner or operator shall prepare and conduct an inspection program which, at a minimum, shall require the owner or operator to:

- a) Observe visually for leaks from all components subject to Section 215.512 on a weekly basis;

- b) Identify all leaking components so that they are obvious and can be located by plant personnel performing visual inspections and Agency personnel performing inspections; and

- c) Record in the monitoring log, the information for each leaking component as required by the provisions of Section 215.514.

(Source: Adopted at 9 III. Reg. 13960, effective August 28, 1985)

Section 215.514 Recordkeeping Requirements

- a) The owner or operator of a coke by-product recovery plant shall maintain a monitoring log that shall contain, at a minimum, the following information for each component found leaking:
 - 1) The name of the process unit where the observed leaking component is located;
 - 2) Identification of the type of component (e.g., valve, seal);
 - 3) The date on which the leaking component is first observed;
 - 4) The date on which a leaking component is repaired;
 - 5) Identification of the type of leaking components which cannot be repaired until unit shutdown; and
 - 6) Identification of component leaks which are not repaired within 21 days after discovery because of the unavailability of replacement parts, including the date the repair part was ordered and the date the repair part was received.

- b) The monitoring log shall be retained by the owner or operator for a minimum of two years after the date on which the record was made.

- c) Copies of the monitoring log shall be made available to the Agency upon verbal or written request at a reasonable time.

(Source: Adopted at 9 III. Reg. 13960, effective August 28, 1985)

Section 215.515 Reporting Requirements

The owner or operator of a coke by-product recovery plant shall submit to the Agency, prior to the first day of May and August of each year, a signed statement attesting that all monitoring and repairs were performed as required under Section 215.512.

(Source: Adopted at 9 III. Reg. 13960, effective August 28, 1985)

Section 215.516 Compliance Dates

The owner or operator of an emission source subject to:

a) Section 215.510 shall comply with that Section by December 31, 1986;

b) Sections 215.512 through 215.514 shall comply with those Sections by December 31, 1985.

(Source: Adopted at 9 Ill. Reg. 13960, effective August 28, 1985)

Section 215.517 Compliance Plan

The owner or operator of a facility or emission source subject to this Subpart shall submit to the Agency, a compliance plan and project completion schedule for:

a) Section 215.510 by August 31, 1986;

b) Section 215.514 by October 31, 1985.

(Source: Adopted at 9 Ill. Reg. 13960, effective August 28, 1985)

SUBPART V: AIR OXIDATION PROCESSES

Section 215.520 Applicability

This Subpart applies to plants using air oxidation processes which are located in any of the following counties: Will, McHenry, Cook, DuPage, Lake, Kane, Madison, St. Clair, Macoupin and Monroe.

(Source: Added at 11 Ill. Reg. 20829, effective December 14, 1987)

Section 215.521 Definitions

In addition to the definitions of 35 Ill. Adm. Code 211, the following definitions apply to this Subpart:

"Air Oxidation Process": any unit process including ammoxidation and oxychlorination which uses air or a combination of air and oxygen as an oxidant in combination with one or more organic reactants to produce one or more organic compounds.

"Cost Effectiveness": the annual expense for cost of control of a given process stream divided by the reduction in emissions of organic material of that stream.

"Flow (F)": Vent stream flowrate (scm/min) at a standard temperature of 20°C.

"Full Operating Flowrate": Maximum operating capacity of the facility.

"Hourly Emissions (E)": Hourly emissions reported in kg/hr measured at full operating flowrate.

"Net Heating Value (H)": Vent stream net heating value (MJ/scm), where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mm Hg, but the standard temperature

for determining the volume corresponding to one mole is 20°C, as in the definition of "Flow."

"Process Vent Stream": An emission stream resulting from an air oxidation process.

"Total Resource Effectiveness Index (TRE)": Cost effectiveness in dollars per megagram of controlling any gaseous stream vented to the atmosphere from an air oxidation process divided by \$1600/Mg, using the criteria and methods set forth in this Subpart and Appendices E and F.

(Source: Added at 11 Ill. Reg. 20829, effective December 14, 1987)

Section 215.525 Emission Limitations for Air Oxidation Processes

a) No person shall cause or allow the emission of volatile organic material (VOM) from any process vent stream unless the process vent stream is vented to a combustion device which is designed and operated either:

1) To reduce the volatile organic emissions vented to it with an efficiency of at least ninety eight percent (98%) by weight; or

2) To emit volatile organic material at a concentration less than twenty parts per million by volume, dry basis.

b) Air oxidation facilities for which an existing combustion device is employed to control process VOM emissions are not required to meet the 98 percent emissions limit until the combustion device is replaced for other reasons, which shall be considered to include, but not be limited to, normal maintenance, malfunction, accident, and obsolescence. The combustion device is considered to be replaced when:

1) All of the device is replaced; or

2) When the cost of the repair of the device or the cost of replacement of part of the device exceeds 50% of the cost of replacing the entire device with a device which complies.

c) The limitations of subsection (a) do not apply to any process vent stream or combination of process vent streams which has a Total Resource Effectiveness Index (TRE) greater than 1.0, as determined by the following methods:

1) If an air oxidation process has more than one process vent stream, TRE shall be based upon a combination of the process vent streams.

2) TRE of a process vent stream shall be determined according to the following equation:

$$TRE = E^{-1} [a + bF^n + cF + dFH + e(FH)^n + fF^{0.5}]$$

where:

n = 0.88

TRE = Total resource effectiveness index.

F = Vent stream flowrate (scm/min), at a standard temperature of 20°C.

E = Hourly measured emissions in kg/hr.

H = Net heating value of vent stream (MJ/scm), where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20°C, as in the definition of "Flow".

a, b, c, d,

e and f = Coefficients obtained by use of Appendix F.

- 3) For nonchlorinated process vent streams, if the net heating value, H, is greater than 3.6 MJ/scm, F shall be replaced by F' for purposes of calculating TRE. F' is computed as follows:

$$F' = FH / 3.6$$

where F and H are as defined in subsection (c)(2).

- 4) The actual numerical values used in the equation described in subsection (c)(2) shall be determined as follows:

A) All reference methods and procedures for determining the flow, (F), hourly emissions, (E), and net heating, (H), value shall be in accordance with Appendix E.

B) All coefficients described in subsection (c)(2) shall be in accordance with Appendix F.

(Source: Added at 11 III. Reg. 20829, effective December 14, 1987)

Section 215.526 Testing and Monitoring

- a) Upon request by the Agency during the permitting process under Section 39 of the Act, the owner or operator of an air oxidation process shall demonstrate compliance with this Subpart by use of the methods specified in Appendix E. This Section does not limit the USEPA's authority, under the Clean Air Act, to require demonstrations of compliance.
- b) A person planning to conduct a volatile organic material emissions test to demonstrate compliance with this Subpart

shall notify the Agency of that intent not less than 30 days before the planned initiation of the tests so that the Agency may observe the test.

(Source: Added at 11 III. Reg. 20829, effective December 14, 1987)

Section 215.527 Compliance Date

Each owner or operator of an emission source subject to this Subpart shall comply with the standards and limitations of this Subpart by December 31, 1987.

(Source: Added at 11 III. Reg. 20829, effective December 14, 1987)

SUBPART W: AGRICULTURE

Section 215.541 Pesticide Exception

The provisions of Sections 215.301 and 215.302 shall not apply to the spraying or use of insecticides, herbicides or other pesticides.

(Source: Amended at 3 III. Reg. 124, effective July 28, 1979)

SUBPART X: CONSTRUCTION

Section 215.561 Architectural Coatings

No person shall cause or allow the sale or use in the Chicago or St. Louis (Illinois) major metropolitan areas of any architectural coating containing more than 20 percent by volume of photo-chemically reactive material in containers having a capacity of more than one gallon.

(Source: Amended at 3 III. Reg. 124, effective July 28, 1979)

Section 215.562 Paving Operations

The provisions of Sections 215.301 and 215.302 shall not apply to the application of paving asphalt and pavement marking paint from sunrise to sunset.

(Source: Amended at 3 III. Reg. 124, effective July 28, 1979)

Section 215.563 Cutback Asphalt

a) No person shall cause or allow the use or application of cutback asphalt for paving, resurfacing, reconditioning, repairing or otherwise maintaining a roadway unless:

- 1) The use or application of the cutback asphalt commences on or after October 1 of any year and such use or application is completed by April 30 of the following year; or

2) The cutback asphalt is a long-life stockpile material which remains in stock after April 30 of each year and as such it may be used until depleted for patching potholes and for other similar repair work; or

3) The cutback asphalt is to be used solely as an asphalt prime coat.

b) Sources subject to this Section are not required to submit or obtain an Agency approved compliance plan or project completion schedule under 35 III. Adm. Code 201, Subpart W.

(Source: Amended at 3 III. Reg. 124, effective July 28, 1979)

SUBPART Y: GASOLINE DISTRIBUTION

Section 215.581 Bulk Gasoline Plants

a) Subject to subsection (e), no person may cause or allow the transfer of gasoline from a delivery vessel into a stationary storage tank located at a bulk gasoline plant unless:

1) The delivery vessel and the stationary storage tank are each equipped with a vapor collection system that meets the requirements of subsection (d)(4);

2) Each vapor collection system is operating;

3) The delivery vessel displays the appropriate sticker pursuant to the requirements of Section 215.584(b) or (d);

4) The pressure relief valve(s) on the stationary storage tank and the delivery vessel are set to release at no less than 0.7 psi or the highest pressure allowed by state or local fire codes or the guidelines of the National Fire Prevention Association; and

5) The stationary storage tank is equipped with a submerged loading pipe.

b) Subject to subsection (f), no person may cause or allow the transfer of gasoline from a stationary storage tank located at a bulk gasoline plant into a delivery vessel unless:

1) The requirements set forth in subsections (a)(1) through (a)(4) are met; and

2) Equipment is available at the bulk gasoline plant to provide for the submerged filling of the delivery vessel or the delivery vessel is equipped for bottom loading.

c) Subject to subsection (e), each owner of a stationary storage tank located at a bulk gasoline plant shall:

1) Equip each stationary storage tank with a vapor control system that meets the

requirements of subsection (a) or (b), whichever is applicable;

2) Provide instructions to the operator of the bulk gasoline plant describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunction of a vapor control system; and

3) Repair, replace or modify any worn out or malfunctioning component or element of design.

d) Subject to subsection (e), each operator of a bulk gasoline plant shall:

1) Maintain and operate each vapor control system in accordance with the owner's instructions;

2) Promptly notify the owner of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system; and

3) Maintain gauges, meters or other specified testing devices in proper working order;

4) Operate the bulk plant vapor collection system and gasoline loading equipment in a manner that prevents:

A) Gauge pressure from exceeding 18 inches of water and vacuum from exceeding 6 inches of water, as measured as close as possible to the vapor hose connection; and

B) A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B; and

C) Avoidable leaks of liquid during loading or unloading operations.

5) Provide a pressure tap or equivalent on the bulk plant vapor collection system in order to allow the determination of compliance with 215.581(d)(4)(A); and

6) Within 15 business days after discovery of the leak by the owner, operator, or the Agency, repair and retest a vapor collection system which exceeds the limits of subsection (d)(4)(A) or (B).

e) The requirements of subsections (a), (c) and (d) shall not apply to:

1) Any stationary storage tank with a capacity of less than 575 gallons; or

2) Any bulk gasoline plant whose annual gasoline throughput is less than 150,000 gallons as averaged over the preceding three calendar years.

f) The requirements of subsection (b) shall only apply to bulk gasoline plants:

- 1) That have an annual gasoline throughput greater than or equal to 1,000,000 gallons, as averaged over the preceding three calendar years; and
- 2) That either distribute gasoline to gasoline dispensing facilities subject to the requirements of Section 215.583(a)(2) or that are located in the following counties: Boone, Cook, DuPage, Kane, Lake, Madison, McHenry, Peoria, Rock Island, St. Clair, Tazewell, Will or Winnebago.

g) Bulk gasoline plants were required to take certain actions to achieve compliance which are summarized in Appendix C.

(Source: Amended in R85-21A at 11 Ill. Reg. 11770, effective June 29, 1987)

Section 215.582 Bulk Gasoline Terminals

a) No person may cause or allow the transfer of gasoline into any delivery vessel from any bulk gasoline terminal unless:

- 1) The bulk gasoline terminal is equipped with a vapor control system that limits emission of volatile organic material to 80 mg/l (0.00067 lbs/gal) of gasoline loaded;
- 2) The vapor control system is operating and all vapors displaced in the loading of gasoline to the delivery vessel are vented only to the vapor control system;
- 3) There is no liquid drainage from the loading device when it is not in use;
- 4) All loading and vapor return lines are equipped with fittings which are vapor tight; and
- 5) The delivery vessel displays the appropriate sticker pursuant to the requirements of Section 215.584(b) or (d); or, if the terminal is driver-loaded, the terminal owner or operator shall be deemed to be in compliance with this section when terminal access authorization is limited to those owners and/or operators of delivery vessels who have provided a current certification as required by Section 215.584(c)(3).

b) Emissions of organic material from bulk gasoline terminals shall be determined by the procedure described in EPA-450/2-77-026, Appendix A, as revised from time to time, or by any other equivalent procedure approved by the Agency.

c) Bulk gasoline terminals were required to take certain actions to achieve compliance which are summarized in Appendix C.

d) The operator of a bulk gasoline terminal shall:

- 1) Operate the terminal vapor collection system and gasoline loading equipment in a manner that prevents:
 - A) Gauge pressure from exceeding 18 inches of water and vacuum from exceeding 6 inches of water as measured as close as possible to the vapor hose connection; and
 - B) A reading equal to or greater than 100 percent of the lower explosive limit (LEL, measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B; and
 - C) Avoidable leaks of liquid during loading or unloading operations.
- 2) Provide a pressure tap or equivalent on the terminal vapor collection system in order to allow the determination of compliance with 215.582(d)(1)(A); and
- 3) Within 15 business days after discovery of the leak by the owner, operator, or the Agency, repair and retest a vapor collection system which exceeds the limits of subsection (d)(1)(A) or (B).

(Source: Amended in R85-21(A) at 11 Ill. Reg. 11770, effective June 29, 1987.

Section 215.583 Gasoline Dispensing Facilities

a) Subject to subsection (b), no person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing facility unless:

- 1) The tank is equipped with a submerged loading pipe; and
- 2) The vapors displaced from the storage tank during filling are processed by a vapor control system that includes one or more of the following:
 - A) A vapor collection system that meets the requirements of subsection (d)(4); or
 - B) A refrigeration-condensation system or any other system approved by the Agency that recovers at least 90 percent by weight of all vaporized organic material from the equipment being controlled; and
 - C) The delivery vessel displays the appropriate sticker pursuant to the requirements of Section 215.584(b) or (d).

b) The requirements of subsection (a)(2) shall not apply to transfers of gasoline to a

stationary storage tank at a gasoline dispensing facility if:

- 1) The tank is equipped with a floating roof or other system of equal or better emission control as approved by the Agency;
 - 2) The tank has a capacity of less than 2000 gallons and is in place and operating before January 1, 1979;
 - 3) The tank has a capacity of less than 575 gallons; or
 - 4) The tank is not located in any of the following counties: Boone, Cook, DuPage, Kane, Lake, Madison, McHenry, Peoria, Rock Island, St. Clair, Tazewell, Will or Winnebago.
- c) Subject to subsection (b), each owner of a gasoline dispensing facility shall:
- 1) Install all control systems and make all process modifications required by subsection (a);
 - 2) Provide instructions to the operator of the gasoline dispensing facility describing necessary maintenance operations and procedures for prompt notification of the owner in case of any malfunction of a vapor control system; and
 - 3) Repair, replace or modify any worn out or malfunctioning component or element of design.
- d) Subject to subsection (b), each operator of a gasoline dispensing facility shall:
- 1) Maintain and operate each vapor control system in accordance with the owner's instructions;
 - 2) Promptly notify the owner of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system;
 - 3) Maintain gauges, meters or other specified testing devices in proper working order;
 - 4) Operate the vapor collection system and delivery vessel unloading points in a manner that prevents:
 - A) A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B, and
 - B) Avoidable leaks of liquid during the filling of storage tanks; and
 - 5) Within 15 business days after discovery of the leak by the owner, operator, or

the Agency, repair and retest a vapor collection system which exceeds the limits of subsection (d)(4)(A).

- e) Gasoline dispensing facilities were required to take certain actions to achieve compliance which are summarized in Appendix C.

(Source: Amended in RAS-21(A) at 11 Ill. Reg. 11770, effective June 29, 1987)

Section 215.584 Gasoline Delivery Vessels

- a) Any delivery vessel equipped for vapor control by use of vapor collection equipment:

- 1) Shall have a vapor space connection that is equipped with fittings which are vapor tight;

- 2) Shall have its hatches closed at all times during loading or unloading operations, unless a top loading vapor recovery system is used;

- 3) Shall not internally exceed a gauge pressure of 18 inches of water or a vacuum of 6 inches of water;

- 4) Shall be designed and maintained to be vapor tight at all times during normal operations;

- 5) Shall not be refilled in Illinois at other than:

A) A bulk gasoline terminal that complies with the requirements of Section 215.582 or

B) A bulk gasoline plant that complies with the requirements of Section 215.587(b)(1) and (2).

- 6) Shall be tested annually in accordance with the pressure-vacuum test procedure described in EPA 450/2-78-051 Appendix A. Each vessel must be repaired and retested within 15 business days after discovery of the leak by the owner, operator, or the Agency, when it fails to sustain:

A) A pressure drop of no more than three inches of water in five minutes; and

B) A vacuum drop of no more than three inches of water in five minutes.

- b) Any delivery vessel meeting the requirements of Subsection (a) shall have a sticker affixed to the tank adjacent to the tank manufacturer's data plate which contains the tester's name, the tank identification number and the date of the test. The sticker shall be in a form prescribed by the Agency, and shall be displayed no later than December 31, 1987.

- c) The owner or operator of a delivery vessel shall:

- 1) Maintain copies of any test required under Subsection (a)(6) for a period of 3 years;
- 2) Provide copies of these tests to the Agency upon request; and
- 3) Provide annual test result certification to bulk gasoline plants and terminals where the delivery vessel is loaded.
- d) Any delivery vessel which has undergone and passed a test in another state which has a USEPA-approved leak testing and certification program will satisfy the requirements of Subsection (a). Delivery vessels must display a sticker, decal or stencil approved by the state where tested or comply with the requirements of Subsection (b). All such stickers, decals or stencils shall be displayed no later than December 31, 1987.

(Source: Added in R85-21(A) at 11 Ill. Reg. 11770, effective June 29, 1987)

SUBPART 2: DRY CLEANERS

Section 215.601 Perchloroethylene Dry Cleaners

The owner or operator of a dry cleaning facility which uses perchloroethylene shall:

- a) Vent the entire dryer exhaust through a properly designed and functioning carbon adsorption system or equally effective control device; and
- b) Emit no more than 100 ppmv of volatile organic material from the dryer control device before dilution, or achieve a 90 percent average reduction before dilution; and
- c) Immediately repair all components found to be leaking liquid volatile organic material; and
- d) Cook or treat all diatomaceous earth filters so that the residue contains 25 kg (55 lb) or less of volatile organic material per 100 kg (220 lb) of wet waste material; and
- e) Reduce the volatile organic material from all solvent stills to 60 kg (132 lb) or less per 100 kg (220 lb) of wet waste material; and
- f) Drain all filtration cartridges in the filter housing or other sealed container for at least 24 hours before discarding the cartridges; and
- g) Dry all drained filtration cartridges in equipment connected to an emission-reduction system or in a manner that will eliminate emission of volatile organic material to the atmosphere.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.602 Exemptions

The provisions of Section 215.601 are not applicable to perchloroethylene dry cleaning operations which are coin-operated or to dry cleaning facilities consuming less than 30 gallons per month (360 gallons per year) of perchloroethylene.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.603 Testing and Monitoring

- a) Compliance with Section 215.601(a), (f) and (g) shall be determined by a visual inspection;
- b) Compliance with Section 215.601(c) shall be determined by a visual inspection of the following: hose connections, unions, couplings and valves; machine door gaskets and sealings; filter head gasket and seating; pumps; base tanks and storage containers; water separators; filter sludge recovery; distillation unit; diverter valves; saturated lint from lint baskets; and cartridge filters; and
- c) Compliance with Section 215.601(b), (d) and (e) shall be determined by methods or procedures approved by the Agency.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.604 Compliance Dates and Geographical Areas

- a) Except as otherwise stated in subsection (b), every owner or operator of an emission source subject to this Subpart shall comply with its standards and limitations in accordance with the following dates:
 - 1) For Section 215.601(a) through (c), by December 31, 1983;
 - 2) For Section 215.601(d) through (g), by May 1, 1983.
- b) If an emission source is not located in one of the counties listed below and is also not located in any county contiguous thereto, the owner or operator of the emission source shall comply with the requirements of Sections 215.601 through 215.603 no later than December 31, 1987:

Cook	Macoupin
DuPage	Madison
Kane	Monroe
Lake	Saint Clair

(Board Note: These counties are proposed to be designated as nonattainment by the USEPA at 47 Fed. Reg. 31588, July 21, 1982.)

- c) Notwithstanding subsection (b) above, if any county is designated as nonattainment by the

USEPA at any time subsequent to the effective date of this Section, the owner or operator of an emission source located in that county or any county contiguous to that county who would otherwise be subject to the compliance date in subsection (b) shall comply with the requirements of Sections 215.601 through 215.603 within one year from the date of redesignation but in no case later than December 31, 1987.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.605 Compliance Plan

- a) The owner or operator of an emission source subject to Section 215.604(a) shall submit to the Agency a compliance plan, pursuant to 35 Ill. Adm. Code 201, Subpart H, including a project completion schedule where applicable, no later than, for Section 215.601(a) and (b), April 21, 1983.
- b) The owner or operator of an emission source subject to Section 215.604(b) shall submit to the Agency a compliance plan, including a project completion schedule where applicable, no later than December 31, 1986.
- c) The owner or operator of an emission source subject to Section 215.604(c) shall submit a compliance plan, including a project completion schedule within 90 days after the date of redesignation, but in no case later than December 31, 1986.
- d) Unless the submitted compliance plan or schedule is disapproved by the Agency, the owner or operator of a facility or emission source subject to the rules specified in subsection (a), (b) or (c) may operate the emission source according to the plan and schedule as submitted.
- e) The plan and schedule shall meet the requirements of 35 Ill. Adm. Code 201, Subpart H, including specific interim dates as required in 35 Ill. Adm. Code 201.242.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.606 Exception to Compliance Plan

Coin-operated dry cleaning operations and dry cleaning facilities consuming less than 30 gallons per month (360 gallons per year) of perchloroethylene are not required to submit or obtain an Agency approved compliance plan or project completion schedule.

(Source: Adopted at 7 Ill. Reg. 1244, effective January 21, 1983)

Section 215.607 Standards for Petroleum Solvent Dry Cleaners

- a) The owner or operator of a petroleum solvent dry cleaning dryer shall either:

- 1) Limit emissions of volatile organic material to the atmosphere to an average of 3.5 kilograms of volatile organic material per 100 kilograms dry weight of articles dry cleaned, or

- 2) Install and operate a solvent recovery dryer in a manner such that the dryer remains closed and the recovery phase continues until a final solvent flow rate of 50 milliliters per minute is attained.

b) The owner or operator of a petroleum solvent filtration system shall either:

- 1) Reduce the volatile organic material content in all filtration wastes to 1.0 kilogram or less per 100 kilograms dry weight of articles dry cleaned, before disposal, and exposure to the atmosphere, or

- 2) Install and operate a cartridge filtration system, and drain the filter cartridges in their sealed housings for 8 hours or more before their removal.

(Source: Added at 11 Reg. 7296, effective April 3, 1987)

Section 215.608 Operating Practices for Petroleum Solvent Dry Cleaners

In order to minimize fugitive solvent emissions, the owner or operator of a petroleum solvent dry cleaning facility shall employ good housekeeping practices including the following:

a) General Housekeeping Requirements

- 1) Equipment containing solvent (washers, dryers, extractors and filters) shall remain closed at all times except during load transfer and maintenance. Gint filter and button trap covers shall remain closed except when solvent-laden material is being removed.

- 2) Cans, buckets, barrels and other containers of solvent or of solvent-laden material shall be covered except when in use.

- 3) Solvent-laden material shall be exposed to the atmosphere only for the minimum time necessary for load transfer.

b) Installation and operation of equipment:

- 1) All cartridge filters shall be enclosed and operated in accordance with the procedures and specifications recommended by the manufacturer for the cartridge filter. After installation, the cartridges shall be inspected, monitored and maintained in accordance with the manufacturer's recommendations; and

- 2) Vents on containers for new solvent and for solvent-containing waste shall be constructed and maintained so as to minimize solvent vapor emissions.

Criteria for the minimization of solvent vapor emissions include the elimination of solvent buckets and barrels standing open to the atmosphere, and the repair of gaskets and seals that expose solvent-rich environments to the atmosphere, to be determined through visual inspection.

(Source: Added at 11 Reg. 7296, effective April 3, 1987)

Section 215.609 Program for Inspection and Repair of Leaks

a) The owner or operator of a petroleum solvent dry cleaning facility shall conduct the following visual inspections on a weekly basis:

- 1) Washers, dryers, solvent filters, settling tanks, vacuum stills and containers and conveyors of petroleum solvent shall be inspected for visible leaks of solvent liquid.
- 2) Pipes, hoses and fittings shall be inspected for active dripping or dampness.
- 3) Pumps and filters shall be inspected for leaks around seals and access covers.
- 4) Gaskets and seals shall be inspected for wear and defects.

b) Leaks of petroleum solvent liquid and vapors shall be repaired within three working days of detection, unless necessary replacement parts are not on site.

- 1) If necessary, repair parts shall be ordered within three working days of detection of the leak.
- 2) The leak shall be repaired within three days of delivery of necessary parts.

(Source: Added at 11 Ill. Reg. 7296, effective April 3, 1987)

Section 215.610 Testing and Monitoring

a) Compliance with Sections 215.607(b)(2), 215.608 and 215.609 shall be determined by visual inspection; and

b) Compliance with Sections 215.607(a)(2) and (b)(1) shall be determined by methods described in EPA-450/3-82-009 (1982) and does not include any later amendments or editions.

c) If a control device is used to comply with Section 215.607(a)(1), then compliance shall be determined using 40 CFR 60 Appendix A, Method 25 (1984) and does not include any later amendments or editions.

(Source: Added at 11 Ill. Reg. 7296, effective April 3, 1987)

Section 215.611 Exemption for Petroleum Solvent Dry Cleaners

The provisions of Sections 215.607 through 215.610 shall not apply to petroleum solvent dry cleaning facilities whose emissions of volatile organic material do not exceed 91 megagrams (100 tons) per year in the absence of pollution control equipment or whose emissions of volatile organic material, as limited by the operating permit, will not exceed 91 megagrams (100 tons) per year in the absence of pollution control equipment.

(Source: Added at 11 Ill. Reg. 7296, effective April 3, 1987)

Section 215.612 Compliance Dates and Geographical Areas

Owners and operators of emission sources located in the counties listed below shall comply with the requirements of Sections 215.607 through 215.609 as expeditiously as practicable but no later than December 31, 1987:

Cook	Madison
DuPage	McHenry
Kane	Monroe
Lake	St. Clair
Macoupin	Will

(Source: Added at 11 Ill. Reg. 7296, effective April 3, 1987)

Section 215.613 Compliance Plan

a) The owner or operator of an emission source subject to Section 215.610(a) shall submit to the Agency a compliance plan, including a project completion schedule where applicable, no later than May 31, 1987.

b) The plan and schedule shall meet the requirements of 35 Ill. Adm. Code 201.

(Source: Added at 11 Ill. Reg. 7296, effective April 3, 1987).

SUBPART AA: PAINT AND INK MANUFACTURING

Section 215.620 Applicability

a) This Subpart shall apply to the following counties: Cook, DuPage, Kane, Lake, Macoupin, Madison, McHenry, Monroe, St. Clair and Will.

b) This Subpart shall apply to all paint and ink manufacturing plants which:

- 1) Include process emission sources not subject to Subparts B, E, F, W, P, Q, R, S, U, V, X, Y or Z of this Part, and which process emission sources as a group would emit 100 tons or more per year of volatile organic material if no air pollution control equipment were used, or

- 2) produce more than 2,000,000 gallons per year of paints or ink formulations, which contain less than 10 percent, by weight, water, and ink formulations not containing as the primary solvents water, Mangle oil, or glycol.

c) For the purposes of this Subpart, uncontrolled volatile organic material emissions are the emissions of volatile organic material which would result if no air pollution control equipment were used.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

Section 215.621 Exemption for Waterbase Material and Heatset Offset Ink

The requirements of Sections 215.624, 215.625 and 215.628(a) shall not apply to equipment while it is being used to produce paint or ink formulations which contain 10 percent or more, by weight, water, or inks containing Mangle oil and glycol as the primary solvent.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

Section 215.623 Permit Conditions

No person shall violate any condition in a permit when the condition results in exclusion of the plant or an emission source from this Subpart.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

Section 215.624 Open-top Mills, Tanks, Vats or Vessels

No person shall operate an open-top mill, tank, vat or vessel, with a volume of more than 12 gallons for the production of paint or ink unless:

- a) The mill, tank, vat or vessel is equipped with a cover which completely covers the mill, tank, vat or vessel opening, except for an opening no larger than necessary to allow for safe clearance for a mixer shaft. Such cover shall extend at least 1/2 inch beyond the outer rim of the opening or be attached to the rim.
- b) The cover remains closed, except when production, sampling, maintenance, or inspection procedures require access.
- c) The cover is maintained in good condition, such that when in place, it maintains contact with the rim of the opening for at least 90% of the circumference of the rim.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

Section 215.625 Grinding Mills

- a) No person shall operate a grinding mill for the production of paint or ink which is not maintained in accordance with the manufacturer's specifications.
- b) No person shall operate a grinding mill fabricated or modified after the effective date of this Subpart which is not equipped with fully enclosed screens.
- c) The manufacturer's specifications shall be kept on file at the plant by the owner or operator of the grinding mill and be made available to any person upon verbal or written request during business hours.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

Section 215.628 Leaks

The owner or operator of a paint or ink manufacturing plant shall, for the purpose of detecting leaks, conduct an equipment monitoring program consistent with the following:

- a) Each pump shall be checked by visual inspection each calendar week for indications of leaks, that is, liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, the pump shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected.
- b) Any pump, valve, pressure relief valve, sampling connection, open-ended valve, and flange or connector containing a fluid which is at least 10 percent by weight volatile organic material which appears to be leaking on the basis of sight, smell, or sound shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected.
- c) A weather proof, readily visible tag, in bright colors such as red or yellow, bearing an identification number and the date on which the leak was detected shall be attached to leaking equipment. The tag may be removed upon repair, that is, when the equipment is adjusted or otherwise altered to allow operation without leaking.
- d) When a leak is detected, the owner or operator shall record the date of detection and repair and the record shall be retained at the plant for at least 2 years from the date of each detection or each repair attempt. The record shall be made available to any person upon verbal or written request during business hours.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

Section 215.630 Clean Up

- a) No person shall clean paint or ink manufacturing equipment with organic solvent unless the equipment being cleaned is completely covered or enclosed except for an opening no larger than necessary to allow safe clearance for proper operation of the cleaning equipment, considering the method and materials being used.
- b) No person shall store organic wash solvent in other than closed containers, unless closed containers are demonstrated to be a safety hazard, or dispose of organic wash solvent in a manner such that more than 20 percent by weight is allowed to evaporate into the atmosphere.

(Source: Added at 12 III. Reg. 7311, effective April 8, 1988)

Section 215.636 Compliance Date

Owners and operators of emission sources subject to this Subpart shall comply with its requirements by April 1, 1989.

(Source: Added at 12 III. Reg. 7311, effective April 8, 1988)

SUBPART BB: POLYSTYRENE PLANTS

Section 215.875 Applicability of Subpart BB

The provisions of this Subpart shall apply to polystyrene plants:

- a) Which are located in any of the following counties: Will, McHenry, Cook, DuPage, Lake, Kane, Madison, St. Claire, Monroe and Macoupin;
- b) Which use continuous processes to manufacture polystyrene - polybutadiene co-polymer; and
- c) Which fall within Standard Industrial Classification Group No. 282, Industry No. 2821, except that the manufacture of polystyrene resins need not be the primary manufacturing process at the plant.

(Source: Added at 11 III. Reg. 16706, effective September 30, 1987)

Section 215.877 Emissions Limitation at Polystyrene Plants

No person shall cause or allow the emissions of volatile organic material from the material recovery section to exceed 0.12 kg of Volatile Organic Material per 1000 kg of polystyrene resin produced.

(Source: Added at 11 III. Reg. 16706, effective September 30, 1987)

Section 215.879 Compliance Date

Every owner and operator of an emission source subject to this Subpart shall comply with its standards and limitations by December 31, 1987.

(Source: Added at 11 III. Reg. 16706, effective September 30, 1987)

Section 215.881 Compliance Plan

- a) The owner or operator of an emission source subject to the requirements of this Subpart shall submit to the Agency a compliance plan in accordance with 35 III. Adm. Code 201, Subpart H, including a project completion schedule on or before December 1, 1987.
- b) Unless the submitted compliance plan or schedule is disapproved by the Agency, the owner or operator of a facility or emission source subject to this Subpart may operate the emission source according to the plan and schedule as submitted.
- c) The plan and schedule shall meet the requirements of 35 III. Adm. Code 201, Subpart H and Section 215.883.

(Source: Added at 11 III. Reg. 16706, effective September 30, 1987)

Section 215.883 Special Requirements for Compliance Plan

For sources subject to this Subpart, an approvable compliance plan shall include:

- a) A description of each process which is subject to an emissions limitation;
- b) Quantification of the emissions from each process;
- c) A description of the procedures and methods used to determine the emissions of volatile organic material;
- d) A description of the methods which will be used to demonstrate compliance with the allowable plantwide emission limitation (Section 215.877), including a method of inventory, recordkeeping and emission calculation or measurement.

(Source: Added at 11 III. Reg. 16706, effective September 30, 1987)

Section 215.886 Testing and Monitoring

- a) Upon a reasonable request of the Agency, the owner or operator of a polystyrene plant subject to this Subpart shall at his own expense demonstrate compliance by use of the following method: 40 CFR 60, Appendix A, Method 25 - Determination of Total Gaseous Non-Methane Organic Emissions as Carbon (1984). The incorporation by reference contains no later amendments or editions.

- b) A person planning to conduct a volatile organic material emissions test to demonstrate compliance with this Subpart shall notify the Agency of that intent not less than 30 days before the planned initiation of the tests so the Agency may observe the test.

(Source: Added at 11 Ill. Reg. 16706, effective September 30, 1987)

SUBPART PP: MISCELLANEOUS FABRICATED PRODUCT MANUFACTURING PROCESSES

Section 215.920 Applicability

- a) The requirements of this Subpart shall apply to the following counties: Cook, DuPage, Kane, Lake, Macoupin, Madison, McHenry, Monroe, St. Clair and Will.
- b) The requirements of this Subpart shall apply to a plant's miscellaneous fabricated product manufacturing process emission sources which are not regulated by Subparts B, E, F, M, P, Q, R, S, U, V, X, Y, or Z if the plant is subject to this Subpart. A plant is subject to this Subpart if it contains process emission sources not regulated by Subparts B, E, F, M, P, Q, R, S, U, V, X, Y, or Z, which as a group would emit 100 tons or more per year of volatile organic material if no air pollution control equipment were used.
- c) If a plant ceases to fulfill the criteria of subsection (b), the requirements of this Subpart shall continue to apply to a miscellaneous fabricated products manufacturing process emission source which was subject to and met the control requirements of Section 215.926.
- d) No limits under this Subpart shall apply to:
- 1) Emission sources with emissions of volatile organic material to the atmosphere less than or equal to 1.0 ton per year if the total emissions from such sources not complying with Section 215.926 does not exceed 5.0 tons per year, and
 - 2) Emission sources whose emissions of volatile organic material are subject to limits in 35 Ill. Adm. Code 230 or 35 Ill. Adm. Code 231; or the Lowest Achievable Emission Rate, pursuant to 35 Ill. Adm. Code 203; or Best Available Control Technology, pursuant to 40 CFR 52.21 (1987) or Section 9.4 of the Act. The Board incorporates by reference 40 CFR 52.21 (1987). This incorporation includes no subsequent amendments or editions.
- e) For the purposes of this Subpart, an emission source shall be considered regulated by a Subpart if it is subject to the limits of that Subpart or it would be subject to the limits of that Subpart if the emission

sources, emitting VOM, had sufficient size, throughput or emissions; or if the emission source did not meet a specific exemption contained in that Subpart.

- f) For the purposes of this Subpart, uncontrolled volatile organic material emissions are the emissions of volatile organic material which would result if no air pollution control equipment were used.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

Section 215.923 Permit Conditions

No person shall violate any condition in a permit when the condition results in exclusion of the plant or an emission source from this Subpart.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

Section 215.926 Control Requirements

- a) Every owner or operator of an emission source of volatile organic material shall operate in compliance with RACT, which for emission sources subject to this Subpart shall be:
- 1) Emission capture and control techniques which achieve an overall reduction in uncontrolled volatile organic material emissions of at least 81% or
 - 2) For coating lines, volatile organic material emissions not to exceed 0.42 kg/T (3.5 lb/gal) of coating materials as applied, excluding water and any compounds which are specifically exempted from the definition of volatile organic material, on a daily basis. Owners and operators complying with this subsection are not required to comply with Section 215.301; or
 - 3) An adjusted RACT emissions limitation obtained pursuant to Subpart I.
- b) Owners and operators of emission sources subject to this Subpart shall comply with its requirements by April 1, 1989.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

SUBPART QQ: MISCELLANEOUS FORMULATION MANUFACTURING PROCESSES

Section 215.940 Applicability

- a) The requirements of this Subpart shall apply to the following counties: Cook, DuPage, Kane, Lake, Macoupin, Madison, McHenry, Monroe, St. Clair and Will.
- b) The requirements of this Subpart shall apply to a plant's miscellaneous formulation

manufacturing process emission sources, which are not regulated by Subparts B, E, F, M, P, Q, R, S, U, V, X, Y, or Z if the plant is subject to this Subpart. A plant is subject to this Subpart if it contains process emission sources, not regulated by Subparts B, E, F, M, P, Q, R, S, U, V, X, Y, or Z, which as a group would emit 100 tons or more per year of volatile organic material if no air pollution control equipment were used.

c) If a plant ceases to fulfill the criteria of subsection (b), the requirements of this Subpart shall continue to apply to a miscellaneous formulation manufacturing process emission source which was subject to and met the control requirements of Section 215.946.

d) No limits under this Subpart shall apply to:

1) Emission sources with emissions of volatile organic material to the atmosphere less than or equal to 2.5 tons per year if the total emissions from such sources not complying with Section 215.946 does not exceed 5.0 tons per year, and

2) Emission sources whose emissions of volatile organic material are subject to limits in 35 Ill. Adm. Code 230 or 35 Ill. Adm. Code 231; or the Lowest Achievable Emission Rate, pursuant to 35 Ill. Adm. Code 203; or Best Available Control Technology, pursuant to 40 CFR 52.21 (1987) or Section 9.4 of the Act. The Board incorporates by reference 40 CFR 52.21 (1987). This incorporation includes no subsequent amendments or editions.

e) For the purposes of this Subpart, an emission source shall be considered regulated by a Subpart if it is subject to the limits of that Subpart or it would be subject to the limits of that Subpart if the emission sources, emitting VOM, had sufficient size, throughput or emissions, or if the emission source did not meet a specific exemption contained in that Subpart.

f) For the purposes of this Subpart, uncontrolled volatile organic material emissions are the emissions of volatile organic material which would result if no air pollution control equipment were used.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

Section 215.943 Permit Conditions

No person shall violate any condition in a permit when the condition results in exclusion of the plant or an emission source from this Subpart.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

Section 215.946 Control Requirements

a) Every owner or operator of an emission source of volatile organic material shall operate in compliance with RACT, which for emission sources subject to this Subpart shall be:

1) Emission capture and control techniques which achieve an overall reduction in uncontrolled volatile organic material emissions of at least 81%; or

2) An adjusted RACT emissions limitation obtained pursuant to Subpart I.

b) Owners and operators of emission sources subject to this Subpart shall comply with its requirements by April 1, 1989.

(Source: Added at 12 Ill. Reg. 7311, effective April 8, 1988)

SUBPART RR: MISCELLANEOUS ORGANIC CHEMICAL MANUFACTURING PROCESSES

Section 215.960 Applicability

a) The requirements of this Subpart shall apply to the following counties: Cook, DuPage, Kane, Lake, Macoupin, Madison, McHenry, Monroe, St. Clair and Will.

b) The requirements of this Subpart shall apply to a plant's miscellaneous organic chemical manufacturing process emission sources which are not regulated by Subparts B, E, F, M, P, Q, R, S, U, V, X, Y, or Z if the plant is subject to this Subpart. A plant is subject to this Subpart if it contains process emission sources, not regulated by Subparts B, E, F, M, P, Q, R, S, U, V, X, Y, or Z, which as a group would emit 100 tons or more per year of volatile organic material if no air pollution control equipment were used.

c) If a plant ceases to fulfill the criteria of subsection (b), the requirements of this Subpart shall continue to apply to a miscellaneous organic chemical manufacturing process emission source which was subject to and met the control requirements of Section 215.966.

d) No limits under this Subpart shall apply to:

1) Emission sources with emissions of volatile organic material to the atmosphere less than or equal to 1.0 ton per year if the total emissions from such sources not complying with Section 215.966 does not exceed 5.0 tons per year, and

2) Emission sources whose emissions of volatile organic material are subject to limits in 35 Ill. Adm. Code 230 or 35 Ill. Adm. Code 231; or the Lowest Achievable Emission Rate, pursuant to 35 Ill. Adm. Code 203; or Best Available

Control Technology, pursuant to 40 CFR 52.21 (1987) or Section 9.4 of the Act. The Board incorporates by reference 40 CFR 52.21 (1987). This incorporation includes no subsequent amendments or editions.

e) For the purposes of this Subpart, an emission source shall be considered regulated by a Subpart if it is subject to the limits of that Subpart or it would be subject to the limits of that Subpart if the emission sources, emitting VOM, had sufficient size, throughput or emissions, or if the emission source did not meet a specific exemption contained in that Subpart.

f) For the purposes of this Subpart, uncontrolled volatile organic material emissions are the emissions of volatile organic material which would result if no air pollution control equipment were used.

(Source: Added at 12 III. Reg. 7311, effective April 8, 1988)

Section 215.963 Permit Conditions

No person shall violate any condition in a permit when the condition results in exclusion of the plant or an emission source from this Subpart.

(Source: Added at 12 III. Reg. 7311, effective April 8, 1988)

Section 215.966 Control Requirements

a) Every owner or operator of an emission source of volatile organic material shall operate in compliance with RACT, which for emission sources subject to this Subpart shall be:

1) Emission capture and control techniques which achieve an overall reduction in uncontrolled volatile organic material emissions of at least 81%; or

2) An adjusted RACT emissions limitation obtained pursuant to Subpart I.

b) Owners and operators of emission sources subject to this Subpart shall comply with its requirements by April 1, 1989.

(Source: Added at 12 III. Reg. 7311, effective April 8, 1988)

Appendix A Rule Info Section Table

Rule	Section
205(a)	215.121
205(b)	215.122
205(c)	215.141
205(d)	215.142
205(e)	215.561
205(f) Preamble	215.301
205(f)(1)	215.302

Rule	Section
205(f)(2)(A)	215.541
205(f)(2)(B)	215.303
205(f)(2)(C)	215.562
205(f)(2)(D)	215.304
205(g)(1)	215.441
205(g)(2)	215.143
205(g)(3)	215.144
205(h)	215.101
205(i)	215.102
205(j)(1)	Appendix C.
	215.125, 215.185.
	215.211, 215.405.
	215.465, 215.604
205(j)(2) & (3)	215.125, 215.211.
	215.405, 215.453.
	215.465, 215.604
205(k)(1)	215.181
205(k)(2)(A)	215.182
205(k)(2)(B)	215.183
205(k)(2)(C)	215.184
205(k)(3)(A)	215.182
205(k)(3)(B)	215.183
205(k)(3)(C)	215.184
205(l)(1)	215.442
205(l)(2)	215.443
205(l)(3)	215.444
205(l)(4)	215.445
205(l)(5)	215.446
205(l)(6)	215.447
205(l)(7)	215.448
205(l)(8)	215.449
205(l)(9)	215.450
205(l)(10)	215.451
205(m) Preamble	215.202, Appendix C
205(m)(1)	215.202, Appendix C
205(m)(2)	215.223(c), 215.581.
	215.582, Appendix C
205(m)(3)	215.583
205(m)(4)	215.452
205(m)(5)	215.210
205(m)(6)	215.406
205(n)(1)	215.204
205(n)(2)	215.205
205(n)(3)	215.206
205(n)(4)	215.207
205(n)(5)	215.208
205(n)(6)	215.209
205(o)(1)	215.581
205(o)(2)	215.582
205(o)(3)(A)	215.123(a)
205(o)(3)(B)	215.123(b)
205(o)(3)(C)	215.124(a)
205(o)(3)(D)	215.124(b)
205(p)	215.583
205(q)	215.563
205(r)	215.106
205(s)(1)	215.401
205(s)(2)	215.402
205(s)(3)	215.403
205(s)(4)	215.404
205(t)(1)	215.461
205(t)(2)	215.462
205(t)(3)	215.463
205(t)(4)	215.464
205(u)(1)	215.601
205(u)(2)	215.602
205(u)(3)	215.603
104(a)(1)	215.185
104(a)(2)	215.185, 215.563.
	215.601

Rule

104(h)

Section

215.126, 215.212,

215.407, 215.466,

215.605

215.305

215.340

215.342

215.344

215.345

215.346

215.347

215.420

215.421

215.422

215.423

215.424

215.425

215.426

215.427

215.428

215.500

215.510

215.512

215.513

215.514

215.515

215.516

215.517

Appendix B**Section Into Rule Table****Section**

215.100

215.101

215.102

215.103

215.104

215.105

215.106

215.121

215.122

215.123(a)

215.123(b)

215.123(c)

215.124(a)

215.124(b)

215.125

215.126

215.141

215.142

215.143

215.144

215.181

215.182

215.183

215.184

215.185

215.201

215.202

215.204

215.205

215.206

215.207

215.208

215.209

Rule

Added in Codification

205(h)

205(i)

Added in Codification

Added in Codification

Added in Codification

205(r)

205(a)

205(b)

205(o)(3)(A)

205(o)(3)(B)

205(m)(2)

205(o)(3)(C)

205(o)(3)(D)

205(j)(1), (2) & (3)

104(h)

205(c)

205(d)

205(g)(2)

205(g)(3)

205(k)(1)

205(k)(2)(A), 205(k)(3)(A),

104(a)(1) & (2)

205(k)(2)(B), 205(k)(3)(B),

104(a)(1)

205(k)(2)(C), 205(k)(3)(C),

104(a)(1)

104(a)(1), 104(a)(2),

205(j)(1)

205(f)(2)(D)

205(m) Preamble, 205(m)(1)

205(n)(1)

205(n)(2)

205(n)(3)

205(n)(4)

205(n)(5)

205(n)(6)

Section

215.210

215.211

215.212

215.213

215.301

215.302

215.303

215.304

215.305

215.340

215.342

215.344

215.345

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215.347

215.401

215.402

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215.407

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215.583

215.601

215.602

Rule

205(m)(5)

205(j)(1), (2) and (3)

104(h)

104(b)(1)

205(f) Preamble

205(f)(1)

205(f)(2)(B)

205(f)(2)(D)

205(s)(1)

205(s)(2)

205(s)(3)

205(s)(4)

205(j)(1), (2) and (3)

205(m)(6)

104(h)

205(g)(1)

205(l)(1)

205(l)(2)

205(l)(3)

205(l)(4)

205(l)(5)

205(l)(6)

205(l)(7)

205(l)(8)

205(l)(9)

205(l)(10)

205(m)(4)

205(j)(1), (2) and (3)

104(a)(1), 104(g)(2)

205(l)(1)

205(l)(2)

205(l)(3)

205(l)(4)

205(j)(1), (2) and (3)

104(h)

205(f)(2)(A)

205(e)

205(f)(2)(C)

205(o), 104(a)(2)

205(m) Preamble,

205(m)(2), 205(o)(1)

205(m) Preamble,

205(m)(2), 205(o)(2)

205(m) Preamble,

205(m)(3), 205(p)

205(u)(1), 104(a)(2)

205(u)(2)

Section**Rule**

215.603 205(u)(3)
 215.604 205(j)(1), (2) and (3)
 215.605 104(h)
 215.606 104(a)(2)
 Appendix A Added in Codification
 Appendix B Added in Codification
 Appendix C 104(a), (g) and (h)
 205(j) and (m)

Appendix C
Past Compliance Dates

Prior to codification, compliance programs, project completion schedules, compliance dates and compliance schedules for all sources were regulated by Rules 104(a), 104(g), 109(h), 205(j) and 205(m). Past compliance date rules have been deleted from the text of the codified rules; future compliance date rules have been grouped with the rules governing the type of source. As an aid to the public, the old text of the compliance date rules are set out at length in this Appendix.

Rule 104(a)
Compliance Programs
and Project Completion
Schedules -- Applicability

- 1) No person shall cause or allow the operation of an emission source which is not in compliance with the requirements of Rule 205(k) unless such person is in compliance with a compliance program as provided for in Rule 104(g) or (h) or Rule 205(m).
- 2) Notwithstanding Rule 104(a)(1), cold cleaning degreasers, coin-operated dry cleaning operations, dry cleaning facilities consuming less than 30 gallons per month (360 gallons per year) of perchloroethylene, and sources subject to Rule 205(g) are not required to submit or obtain an Agency approved compliance plan or project completion schedule.
- 3) Any compliance plan or project completion schedule, where applicable, shall be a binding condition of the operating permit for the source.

Rule 104(g)
Compliance Programs and Project
Completion Schedules --
Submission and Approval Dates

The owner or operator of an emission source subject to the following rules shall have a compliance plan and a project completion schedule, where applicable, approved by the Agency by the following dates. A compliance plan and a project completion schedule where applicable, shall be submitted at least 90 days before the following dates.

- 1) By February 1, 1980. Gasoline dispensing facilities subject to Rule 205(p) and degreasers subject to Rule 205(k) located in

Cook, DuPage, Lake, Kane, McHenry and Will counties.

- 2) By March 1, 1980. Petroleum refineries subject to Rule 205(l), except (1), (4)-(10). Gasoline dispensing facilities subject to Rule 205(p) in Boone, Madison, St. Clair, Peoria, Tazewell, Rock Island and Winnebago counties.
- 3) By April 1, 1980. Degreasers subject to Rule 205(k) located in counties other than Cook, DuPage, Lake, Kane, McHenry or Will. Bulk gasoline plants, bulk gasoline terminals and petroleum liquid storage tanks subject to Rule 205(o), except (o)(3), located in Cook, DuPage, Lake, Kane, McHenry and Will counties.
- 4) By April 1, 1980. Coating lines subject to Rule 205(n), except (n)(1)(J) and (K). Bulk gasoline plants, bulk gasoline terminals and petroleum liquid storage tanks subject to Rule 205(o), except (o)(3), which are located in counties other than Cook, Lake, DuPage, Kane, McHenry or Will.

Rule 104(h)
Compliance Programs and Project
Completion Schedules --
RACT II Compliance Plan Submission
and Approval

- 1) The owner or operator of an emission source subject to Rule 205(j)(1) shall submit to the Agency a compliance plan, including a project completion schedule where applicable, no later than:

Rule	Days After Promulgation
(A) Rules 205(o), (3), 205(s) and 205(t)	90
(B) Rule 205(u) (1)(A) and (B)	90
(C) Rule 205(n) (1)(J) and (K)	210

- 2) The owner or operator of an emission source subject to Rule 205(j)(2) shall submit to the Agency a compliance plan, including a project completion schedule where applicable, no later than December 31, 1986.
- 3) Unless the submitted compliance plan or schedule is disapproved by the Agency, the owner or operator of a facility or emission source subject to the rules specified in Rule 104(h)(1), (2) or (3) may operate the emission source according to the plan and schedule as submitted.
- 4) The plan and schedule shall meet the requirements of Rule 104(b) including specific interim dates as required in Rule 104(b)(2).

Rule 205(j)
Compliance Dates

- 1) Except as otherwise stated in subsection (2), every owner or operator of an emission source

shall comply with the standards and limitations of Rule 205 in accordance with the dates shown in the following table:

Rule	Type of Source	Compliance Date
205(a)-(1)	New Emission Sources	April 14, 1972
205(a)-(1)	Existing Emission Sources	December 31, 1973
205(k)	All Emission Sources	July 1, 1980
205(l)	All Emission Sources	July 1, 1980 (1)-(3)
205(l)	All Emission Sources	See Rule (m) (4)-(10)
205(n)	All Emission Sources	December 31, 1982
205(n)(1) (j)(k)	All Emission Sources	December 31, 1983
205(n)(1)	All Emission (K)(11)	See Rule 205(m)(5)
205(o)(1)	All Emission Sources	July 1, 1981 and (2) (o)(3)
205(p)	All Emission Sources	See Rule 205(m)
205(q)	All Emission Sources	December 31, 1980
205(s) and (t)	All Emission Sources	December 31, 1983
205(u)(1) (A)-(C)	All Emission Sources	December 31, 1983
	All Emission Sources	May 1, 1983

*Except for automobile and light-duty truck manufacturing plants achieving final compliance under a footnote to Rule 205(n)(1).

2) If an emission source is not located in one of the counties listed below** and is also not located in any county contiguous thereto, the owner or operator of the emission source shall comply with the requirements of Rule 205(1)(4)-(10), (n)(1)(j) or (K), (o)(3), (s), (t) or (u) no later than December 31, 1987:

Cook	Macoupin
DuPage	Madison
Kane	Monroe
Lake	Saint Clair

**These counties are proposed to be designated as nonattainment by the U.S. Environmental Protection Agency in Federal Register, Volume 47, page 31588 (July 21, 1982).

3) Notwithstanding subsection (2) above, if any county is designated as nonattainment by the

U.S. Environmental Protection Agency at any time subsequent to the effective date of this Rule, the owner or operator of an emission source located in that county or any county contiguous to that county who would otherwise be subject to the compliance date in subsection (2) shall comply with the requirements of Rule 205(1)(4)-(10), (n)(1)(j) or (K), (o)(3), (s), (t) or (u) within one year from the date of redesignation but in no case later than December 31, 1987.

Rule 205(m) Compliance Schedules

The requirements of this section shall not apply to any source for which a project completion schedule has been submitted to and approved by the Agency under Rule 104. The owner of any emission source subject to the requirements of this section shall certify to the Agency by January 15 of each year beginning January 15, 1980, whether increments of progress required to be met in the previous year have been met.

1) Coating Lines

The owner or operator of coating lines subject to the requirements of Rule 205(n), except (n)(1)(j) and (K), shall take the following actions:

A) Submit to the Agency a compliance program that meets the requirements of Rule 104(5)(1) by January 1, 1980.

B) For sources that, under the approved compliance plan, will comply with Rule 205(n) by use of low solvent coating technology the following increments of progress shall be met:

i) Submit to the Agency by July 1, 1980 and every six months thereafter a report describing in detail the progress in the development, application testing, product quality, customer acceptance and FDA or other government agency approval of the low solvent coating technology.

ii) Initiate process modifications to allow use of low solvent coatings by April 1, 1982.

iii) Complete process modifications to allow use of low solvent coatings by October 1, 1982.

C) For sources that, under the approved compliance plan, will comply with Rule 205(n) by installing emission control equipment, the following increments of progress shall be met:

i) Award contracts for the emission control equipment or issue orders for the purchase of component parts by July 1, 1980.

- 11) Initiate on-site construction or installation of the emission control equipment by July 1, 1982.
- 111) Complete on-site construction or installation of the emission control equipment by October 1, 1982.

2) Bulk Gasoline Plants, Bulk Gasoline Terminals, Petroleum Liquid Storage Tanks

The owner of an emission source subject to the requirements of Rule 205(o), except (o)(3), shall take the following actions:

- A) Submit to the Agency a compliance program that meets the requirements of Rule 104(b)(1) by the date specified in Rule 104(g);
- B) Award contracts for emission control systems or issue orders for the purchase of component parts by July 1, 1980.
- C) Initiate on-site construction or installation of the emission control system by January 1, 1981.
- D) Complete on-site construction or installation of the emission control system and achieve final compliance by July 1, 1981.

3) Gasoline Dispensing Facilities

Owners of gasoline dispensing facilities subject to the requirements of Rule 205(p) shall take the following actions:

- A) Submit to the Agency a compliance program that meets the requirements of Rule 104(b)(1) by the date specified in Rule 104(g);
- B) Achieve final compliance for 33 percent of all gasoline dispensing facilities owned by the owner by July 1, 1980.
- C) Achieve final compliance for 66 percent of all gasoline dispensing facilities owned by the owner by July 1, 1981.
- D) Achieve final compliance for 100 percent of all gasoline dispensing facilities owned by the owner by July 1, 1982.

4) Petroleum Refinery Leaks

The owner or operator of a petroleum refinery shall adhere to the increments of progress contained in the following schedule:

- A) Submit to the Agency a monitoring program plan consistent with Rule 205(1)(5) prior to June 1, 1983.
- B) Submit the first monitoring report pursuant to Rule 205(1)(6)(A)(i) to the Agency prior to July 1, 1983.

5) Coating Lines Subject to Rule 205(n)(1)(K)(11)

The owner or operator of coating lines subject to Rule 205(n)(1)(K)(11) may in lieu of compliance with Rule 205(j)(1) demonstrate compliance through the use of a low solvent coating technology by taking the following actions:

- A) Submit to the Agency a compliance plan, including a project completion schedule, that meets the requirements of Rule 104(b)(1) within 210 days after the effective date of this rule; and
- B) Meet the following increments of progress:
 - i) Submit to the Agency by July 1, 1984 and every six months thereafter a report describing in detail the progress made in the development, application testing, product quality, customer acceptance and FDA or government agency approval of the low solvent coating technology;
 - ii) Initiate process modifications to allow the use of low solvent coatings as soon as coatings meeting Board requirements become commercially available for production use; and
 - iii) Achieve final compliance as expeditiously as possible but no later than December 31, 1984.

6) Rotogravure and Flexography Low Solvent Ink Alternative Compliance Plan

The owner or operator of an emission source subject to Rule 205(s) may in lieu of compliance with Rules 104(b)(1)(A) and 205(j) demonstrate compliance through the use of a low solvent ink program by taking the following actions:

- A) Submit to the Agency a compliance plan, including a compliance schedule, by December 31, 1983 which demonstrates:
 - i) Substantial emission reductions early in the compliance schedule;
 - ii) Greater reductions in emissions than would have occurred without a low solvent ink program; and
 - iii) Final compliance as expeditiously as possible but no later than December 31, 1987; and
- B) Certify to the Agency that
 - i) A low solvent ink compliance strategy is not technically available which would not enable the emission source to achieve compliance by the date specified in Rule 205(j); and

11) An unreasonable economic burden would be incurred if the owner or operator were required to demonstrate compliance by the date specified in Rule 205(j); and

- C) Agree to install one of the control alternatives specified in Rule 205(s)(1)(C) by June 31, 1986 if the specified low-solvent ink strategy fails to achieve scheduled reductions by December 31, 1985.

APPENDIX D

LIST OF CHEMICALS DEFINING SYNTHETIC ORGANIC CHEMICAL AND POLYMER MANUFACTURING

OCPSR No.	Chemical
20	Acetal
30	Acetaldehyde
40	Acetaldehyde
50	Acetamide
65	Acetanilide
70	Acetic acid
80	Acetic anhydride
90	Acetone
100	Acetone cyanohydrin
110	Acetonitrile
120	Acetophenone
125	Acetyl chloride
130	Acetylene
140	Acrolein
150	Acrylamide
160	Acrylic acid & esters
170	Acrylonitrile
180	Adipic acid
185	Adiponitrile
190	Alkyl naphthalenes
200	Allyl alcohol
210	Allyl chloride
220	Aminobenzoic acid
230	Aminoethyl ethanolamine
235	p-aminophenol
240	Amyl acetates
250	Amyl alcohols
260	Amyl amine
270	Amyl chloride
280	Amyl mercaptans
290	Amyl phenol
300	Aniline
310	Aniline hydrochloride
320	Anisidine
330	Anisole
340	Anthranilic acid
350	Anthraquinone
360	Benzaldehyde
370	Benzamide
380	Benzene
390	Benzenedisulfonic acid
400	Benzene-sulfonic acid
410	Benzil
420	Benzilic acid
430	Benzoic acid
440	Benzoin
450	Benzonitrile
460	Benzophenone
480	Benzotrichloride
490	Benzoyl chloride
500	Benzyl alcohol
510	Benzyl amine

OCPSR No.	Chemical
520	Benzyl benzoate
530	Benzyl chloride
540	Benzyl dichloride
550	Biphenyl
560	Bisphenol A
570	Bromobenzene

*The OCPSR Numbers are reference indices assigned to the various chemicals in the Organic Chemical Producers Data Base developed by the USEPA.

OCPSR No.	Chemical
580	Bromonaphthalene
590	Butadiene
592	1-butene
600	n-butyl acetate
630	n-butyl acrylate
640	n-butyl alcohol
650	s-butyl alcohol
660	t-butyl alcohol
670	n-butylamine
680	s-butylamine
690	t-butylamine
700	p-tert-butyl benzoic acid
750	n-butyraldehyde
760	Butyric acid
770	Butyric anhydride
780	Butyronitrile
785	Caprolactam
790	Carbon disulfide
800	Carbon tetrabromide
810	Carbon tetrachloride
820	Cellulose acetate
840	Chloroacetic acid
850	m-chloroaniline
860	o-chloroaniline
870	p-chloroaniline
880	Chlorobenzaldehyde
890	Chlorobenzene
900	Chlorobenzoic acid
905	Chlorobenzotrichloride
910	Chlorobenzoyl chloride
920	Chlorodifluoroethane
921	Chlorodifluoromethane
930	Chloroform
940	Chloronaphthalene
950	o-chloronitrobenzene
951	p-chloronitrobenzene
960	Chlorophenols
964	Chloroprene
965	Chlorosulfonic acid
970	m-chlorotoluene
980	o-chlorotoluene
990	p-chlorotoluene
992	Chlorotrifluoromethane
1000	m-cresol
1010	o-cresol
1020	p-cresol
1021	Mixed cresols
1030	Cresylic acid
1040	Crotonaldehyde
1050	Crotonic acid
1060	Cumene
1070	Cumene hydroperoxide
1080	Cyanoacetic acid
1090	Cyanogen chloride
1100	Cyanuric acid
1110	Cyanuric chloride
1120	Cyclohexane

QCPDB No.	Chemical
1130	Cyclohexanol
1140	Cyclohexanone
1150	Cyclohexene
1160	Cyclohexylamine
1170	Cyclooctadiene
1180	Decanol
1190	Diacetone alcohol
1200	Diaminobenzoic acid
1210	Dichloroaniline
1215	m-dichlorobenzene
1216	o-dichlorobenzene
1220	p-dichlorobenzene
1221	Dichlorodifluoromethane
1240	Dichloroethyl ether
	1,2-dichloroethane
1250	Dichlorohydrin
1270	Dichloropropene
1280	Dicyclohexylamine
1290	Diethylamine
1300	Diethylene glycol
1304	Diethylene glycol diethyl ether
1305	Diethylene glycol dimethyl ether
1310	Diethylene glycol monobutyl ether
1320	Diethylene glycol monobutyl ether acetate
1330	Diethylene glycol monoethyl ether
1340	Diethylene glycol monoethyl ether acetate
1360	Diethylene glycol monomethyl ether
1420	Diethyl sulfate
1430	Difluoroethane
1440	Diisobutylene
1442	Diisodecyl phthalate
1444	Diisooctyl phthalate
1450	Diketene
1460	Dimethylamine
1470	N,N-dimethylaniline
1480	N,N-dimethylether
1490	N,N-dimethylformamide
1495	Dimethylhydrazine
1500	Dimethyl sulfate
1510	Dimethyl sulfide
1520	Dimethylsulfoxide
1530	Dimethylterephthalate
1540	3,5-dinitrobenzoic acid
1545	Dinitrophenol
1560	Dioxane
1570	Dioxolane
1580	O-phenylamine
1590	Diphenyl oxide
1600	Diphenyl thiourea
1610	Dipropylene glycol
1620	Dodecene
1630	Dodecylaniline
1640	Dodecylphenol
1650	Epichlorohydrin
1660	Ethanol
1661	Ethanolamines
1670	Ethyl acetate
1680	Ethyl
1690	Ethyl acrylate
1700	Ethylamine
1710	Ethylbenzene
1720	Ethyl bromide
1730	Ethylcellulose
1740	Ethyl chloride
1750	Ethyl chloroacetate
1760	Ethylcyanoacetate

QCPDB No.	Chemical
1770	Ethylene
1780	Ethylene carbonate
1790	Ethylene Chlorohydrin
1800	Ethylenediamine
1810	Ethylene dibromide
1820	Ethylene glycol
1840	Ethylene glycol diacetate
1870	Ethylene glycol dimethyl ether
1890	Ethylene glycol monobutyl ether
1900	Ethylene glycol monobutyl ether acetate
1910	Ethylene glycol monoethyl ether
1920	Ethylene glycol monoethyl ether acetate
1930	Ethylene glycol monoethyl ether
1940	Ethylene glycol monomethyl ether acetate
1960	Ethylene glycol monophenyl ether
1970	Ethylene glycol monopropyl ether
1980	Ethylene oxide
1990	Ethyl ether
2000	2-ethylhexanol
2010	Ethyl orthoformate
2020	Ethyl oxalate
2030	Ethyl sodium oxaloacetate
2040	Formaldehyde
2050	Formamide
2060	Formic acid
2070	Fumaric acid
2073	Furfural
2090	Glycerol (Synthetic)
2091	Glycerol dichlorohydrin
2100	Glycerol triether
2110	Glycine
2120	Glyoxal
2145	Hexachlorobenzene
2150	Hexachloroethane
2160	Hexadecyl alcohol
2165	Hexamethylenediamine
2170	Hexamethylene glycol
2180	Hexamethylenetetramine
2190	Hydrogen cyanide
2200	Hydroquinone
2210	p-hydroxy-benzoic acid
2240	Isamylene
2250	Isobutanol
2260	Isobutyl acetate
2261	Isobutylene
2270	Isobutyraldehyde
2280	Isobutyric acid
2300	Isodecanol
2320	Isooctyl alcohol
2321	Isopentane
2330	Isophorone
2340	Isophthalic acid
2350	Isoprene
2360	Isopropanol
2370	Isopropyl
2380	Isopropylamine
2390	Isopropyl chloride
2400	Isopropylphenol
2410	Ketene
2414	Linear alkylsulfonate
2417	Linear alkylbenzene
2420	Maleic acid
2430	Maleic anhydride
2440	Malic acid
2450	Mesityl oxide

OCPOB No.	Chemical
2455	Metanilic acid
2460	Methacrylic acid
2490	Methallyl chloride
2500	Methanol
2510	Methyl acetate
2520	Methyl acetoacetate
2530	Methylamine
2540	n-methylaniline
2545	Methyl bromide
2550	Methyl butynol
2560	Methyl chloride
2570	Methyl cyclohexane
2590	Methyl cyclohexanone
2620	Methylene chloride
2630	Methylene dianiline
2635	Methylene diphenyl diisocyanate
2640	Methyl ethyl ketone
2644	Methyl formate
2650	Methyl isobutyl carbinol
2660	Methyl isobutyl ketone
2665	Methyl methacrylate
2670	Methyl pentynol
2690	α-methylstyrene
2700	Morpholine
2710	α-naphthalene sulfonic acid
2720	β-naphthalene sulfonic acid
2730	α-naphthol
2740	β-naphthol
2750	Neopentanoic acid
2756	o-nitroaniline
2757	p-nitroaniline
2760	o-nitroanisole
2762	p-nitroanisole
2770	Nitrobenzene
2780	Nitrobenzoic acid (o, m & p)
2790	Nitroethane
2791	Nitromethane
2792	Nitrophenol
2795	Nitropropane
2800	Nitrotoluene
2810	Nonene
2820	Nonyl phenol
2830	Octyl phenol
2840	Paraldehyde
2850	Pentaerythritol
2851	n-pentane
2855	1-pentene
2860	Perchloroethylene
2882	Perchloromethylmercaptan
2890	o-phenetidine
2900	p-phenetidine
2910	Phenol
2920	Phenolsulfonic acids
2930	Phenyl anthranilic acid
2940	Phenylenediamine
2960	Phthalic anhydride
2970	Phthalimide
2973	s-picoline
2976	Piperazine
3000	Polybutenes
3010	Polyethylene glycol
3025	Polypropylene glycol
3063	Propionaldehyde
3066	Propionic acid
3070	n-propyl alcohol
3075	Propylamine
3080	Propyl chloride
3090	Propylene

OCPOB No.	Chemical
3100	Propylene chlorohydrin
3110	Propylene dichloride
3111	Propylene glycol
3120	Propylene oxide
3130	Pyridine
3140	Quinone
3150	Resorcinol
3160	Resorcylic acid
3170	Salicylic acid
3180	Sodium acetate
3181	Sodium benzoate
3190	Sodium carboxymethylcellulose
3191	Sodium chloroacetate
3200	Sodium formate
3210	Sodium phenate
3220	Sorbic acid
3230	Styrene
3240	Succinic acid
3250	Succinitrile
3251	Sulfanilic acid
3260	Sulfolane
3270	Tannic acid
3280	Terephthalic acid
3290 & 3291	Tetrachloroethanes
3300	Tetrachlorophthalic anhydride
3310	Tetraethyllead
3320	Tetrahydronaphthalene
3330	Tetrahydrophthalic anhydride
3335	Tetramethyllead
3340	Tetramethylenediamine
3341	Tetramethylethylenediamine
3349	Toluene
3350	Toluene-2,4-diamine
3354	Toluene-2,4-diisocyanate
3355	Toluene diisocyanates (mixture)
3360	Toluene sulfonamide
3370	Toluene sulfonic acids
3380	Toluene sulfonylchloride
3381	Toluidines
3390 & 3391	Trichlorobenzenes
3393	1,1,1-trichloroethane
3395	1,1,2-trichloroethane
3400	Trichloroethylene
3410	Trichlorofluoromethane
3411	1,2,3-trichloropropane
3420	1,1,2-trichloro-2,2-trifluoroethane
3430	Triethylamine
3450	Triethylene glycol
3460	Triethylene glycoldimethyl ether
3470	Triisobutylene
3480	Trimethylamine
3490	Vinyl acetate
3510	Vinyl chloride
3520	Vinylidene chloride
3530	Vinyl toluene
3540	Xylene (mixed)
3541	o-xylene
3560	p-xylene
3570	Xylenol
3580	Xylidine
3590	methyldiethyl ether
	Polyethylene
	Polypropylene
	Polystyrene

(Source: Adopted at 9 III. Reg. 13960, effective August 28, 1985)

APPENDIX E REFERENCE METHODS AND PROCEDURES

Introduction

This Appendix presents the reference methods and procedures required for implementing Reasonably Available Control Technology (RACT). Methods and procedures are identified for two types of ACT implementation:

- a) Determination of VOC destruction efficiency for evaluating compliance with the 98 weight percent VOC reduction or 20 ppmv emission limit specified in Sections 215.520 through 215.527; and
- b) Determination of offgas flowrate, hourly emissions and stream net heating value for calculating TRE.

All reference methods identified in this Appendix refer to the reference methods specified at 40 CFR 60, Appendix A, incorporated by reference in Section 215.105.

VOC DESTRUCTION EFFICIENCY DETERMINATION

The following reference methods and procedures are required for determining compliance with the percent destruction efficiency specified in Sections 215.520 through 215.527.

- a) Reference Method 1 or 1A for selection of the sampling site. The control device inlet sampling site for determination of vent stream molar composition or total organic compound destruction efficiency shall be prior to the inlet of any control device and after all recovery devices.
- b) Reference Methods 2, 2A, 2C or 2D for determination of the volumetric flowrate.
- c) Reference Method 3 to measure oxygen concentration of the air dilution correction. The emission sample shall be corrected to 3 percent oxygen.
- d) Reference Method 18 to determine the concentration of total organic compounds (minus methane and ethane) in the control device outlet and total organic compound reduction efficiency of the control device.

TRE DETERMINATION

The following reference methods and procedures are required for determining the offgas flowrate, hourly emissions, and the net heating value of the gas combusted to calculate the vent stream TRE.

- a) Reference Method 1 or 1A for selection of the sampling site. The sampling site for the vent stream flowrate and molar composition determination prescribed in (b) and (c) shall be prior to the inlet of any combustion device, prior to any post-reactor dilution of

the stream with air and prior to any post-reactor introduction of halogenated compounds into the vent stream. Subject to the preceding restrictions on the sampling site, it shall be after the final recovery device. If any gas stream other than the air oxidation vent stream is normally conducted through the recovery system of the affected facility, such stream shall be rerouted or turned off while the vent stream is sampled, but shall be routed normally prior to the measuring of the initial value of the monitored parameters for determining compliance with the recommended RACT. If the air oxidation vent stream is normally routed through any equipment which is not a part of the air oxidation process as defined in 35 Ill. Adm. Code 211.122, such equipment shall be bypassed by the vent stream while the vent stream is sampled, but shall not be bypassed during the measurement of the initial value of the monitored parameters for determining compliance with Subpart V.

- b) The molar composition of the vent stream shall be determined using the following methods:

- 1) Reference Method 18 to measure the concentration of all organics, including those containing halogens, unless a significant portion of the compounds of interest are polymeric (high molecular weight), can polymerize before analysis or have low vapor pressures, in which case Reference Method 25(a) shall be used.
- 2) ASTM D1946-67 (reapproved 1977), incorporated by reference in Section 215.105, to measure the concentration of carbon monoxide and hydrogen.

- 3) Reference Method 4 to measure the content of water vapor, if necessary.

- c) The volumetric flowrate shall be determined using Reference Method 2, 2A, 2C or 2D, as appropriate.

- d) The net heating value of the vent stream shall be calculated using the following equation:

$$H = K \sum_{i=1}^n C_i H_i$$

Where:

H = Net heating value of the sample, MJ/scm, where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20°C, as in the definition of F (vent stream flowrate) below.

K = Constant, 1.740×10^{-7} (1/ppm)
(mole/scm)(MJ/kcal) where standard
temperature for mole/scm is 20°C.

C_i = Concentration of sample component i,
reported on a wet basis, in ppm, as
measured by Reference Method 18 or
ASTM D1946-67 (reapproved 1977),
incorporated by reference in Section
215.105.

M_i = Net heat of combustion of sample
component i, kcal/mole based on
combustion at 25°C and 760 mm Hg. If
published values are not available or
cannot be calculated, the heats of
combustion of vent stream components
are required to be determined using
ASTM D2382-76, incorporated by
reference in Section 215.105.

- e) The emission rate of total organic compounds
in the process vent stream shall be
calculated using the following equation:

$$E = K'F \sum_{i=1}^n C_i M_i$$

where:

E = Emission rate of total organic
compounds (minus methane and ethane)
in the sample in kg/hr.

K' = Constant 2.494×10^{-6} (1/ppm)
(mole/scm) (kg/g) (min/hr), where
standard temperature for (mole/scm)
is 20°C.

M_i = Molecular weight of sample component
i (g/mole).

F = Vent stream flowrate (scm/min), at a
standard temperature of 20°C.

- f) The total vent stream concentration (by
volume) of compounds containing halogens
(ppmv; by compound) shall be summed from the
individual concentrations of compounds
containing halogens which were measured by
Reference Method 18.

(Source: Added at 11 III. Reg. 20829, effective
December 14, 1987)

APPENDIX F COEFFICIENTS FOR THE TOTAL RESOURCE EFFECTIVENESS INDEX (TRE) EQUATION

This Appendix contains values for the total
resource effectiveness index (TRE) equation in
Subpart V.

If a flow rate falls exactly on the boundary
between the indicated ranges, the operator shall
use the row in which the flow rate is maximum.

COEFFICIENTS FOR TRE EQUATION FOR CHLORINATED PROCESS VENT STREAMS WITH NET HEATING VALUE LESS THAN OR EQUAL TO 3.5 MJ/scm

FLOW RATE (scm/min)		a	b	c	d	e	f
Min.	Max.						
0.0	13.5	48.73	0.	0.404	-0.1632	0.	0.
13.5	700.	42.35	0.624	0.404	-0.1632	0.	0.024
700.	1400.	34.38	0.678	0.404	-0.1632	0.	0.034
1400.	2100.	126.41	0.712	0.404	-0.1632	0.	0.042
2100.	2800.	168.44	0.747	0.404	-0.1632	0.	0.049
2800.	3500.	210.47	0.758	0.404	-0.1632	0.	0.054

COEFFICIENTS FOR TRE EQUATION FOR CHLORINATED PROCESS VENT STREAMS WITH NET HEATING VALUE GREATER THAN 3.5 MJ/scm

FLOW RATE (scm/min)		a	b	c	d	e	f
Min.	Max.						
0.	13.5	47.76	0.	-0.292	0.	0.	0.
13.5	700.	41.58	0.605	-0.292	0.	0.	0.0245
700.	1400.	82.84	0.658	-0.292	0.	0.	0.0346
1400.	2100.	123.10	0.691	-0.292	0.	0.	0.0424
2100.	2800.	165.36	0.715	-0.292	0.	0.	0.0490
2800.	3500.	206.62	0.734	-0.292	0.	0.	0.0548

COEFFICIENTS FOR TRE EQUATION FOR NONCHLORINATED PROCESS VENT STREAMS WITH NET HEATING VALUE LESS THAN OR EQUAL TO 0.48 MJ/scm

FLOW RATE (scm/min)		a	b	c	d	e	f
Min.	Max.						
0.	13.5	19.05	0.	0.113	-0.214	0.	0.
13.5	1350.	16.61	0.239	0.113	-0.214	0.	0.0245
1350.	2700.	32.91	0.260	0.113	-0.214	0.	0.0346
2700.	4050.	49.21	0.273	0.113	-0.214	0.	0.0424

COEFFICIENTS FOR TRE EQUATION FOR NONCHLORINATED PROCESS VENT STREAMS WITH NET HEATING VALUE GREATER THAN 0.48 AND LESS THAN OR EQUAL TO 1.9 MJ/scm

FLOW RATE (scm/min)		a	b	c	d	e	f
Min.	Max.						
0.	13.5	19.74	0.	0.400	-0.202	0.	0.
13.5	1350.	18.30	0.138	0.400	-0.202	0.	0.0245
1350.	2700.	36.28	0.150	0.400	-0.202	0.	0.0346
2700.	4050.	54.26	0.158	0.400	-0.202	0.	0.0424

COEFFICIENTS FOR THE EQUATION FOR NONCHLORINATED
PROCESS VENT STREAMS WITH NET HEATING VALUE
GREATER THAN 1.9 AND LESS THAN OR
EQUAL TO 3.6 MJ/scm

FLOW RATE (scm/min)							
Min.	Max.	a	b	c	d	e	f
0	13.5	15.24	0.	0.033	0.	0.	0.
13.5	1190.	13.63	0.157	0.033	0.	0.	0.0245
1190.	2380.	26.95	0.171	0.033	0.	0.	0.0346
2380.	3570.	40.27	0.179	0.033	0.	0.	0.0424

COEFFICIENTS FOR THE EQUATION
FOR NONCHLORINATED PROCESS VENT STREAMS WITH
NET HEATING VALUE GREATER THAN 3.6 MJ/scm

FLOW RATE (scm/min)							
Min.	Max.	a	b	c	d	e	f
0	13.5	15.24	0.	0.	0.0090	0.	0.
13.5	1190.	13.63	0.	0.	0.0090	0.0503	0.0245
1190.	2380.	26.95	0.	0.	0.0090	0.0546	0.0346
2380.	3570.	40.27	0.	0.	0.0090	0.0573	0.0424

(Source: Added at 11 I71. Reg. 20829, effective
December 14, 1987)

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

CHAPTER I: POLLUTION CONTROL BOARD

**SUBCHAPTER C: EMISSION STANDARDS AND
LIMITATIONS FOR STATIONARY SOURCES**

**PART 216
CARBON MONOXIDE EMISSIONS**

SUBPART A: GENERAL PROVISIONS

Section	
216.100	Scope and Organization
216.101	Measurement Methods
216.102	Abbreviations and Conversion Factors
216.103	Definitions
216.104	Incorporations by Reference

SUBPART B: FUEL COMBUSTION EMISSION SOURCES

Section	
216.121	Fuel Combustion Emission Sources
216.122	Exception, Midwest Grain Products

SUBPART C: INCINERATORS

Section	
216.141	Incinerators
216.142	Exceptions

**SUBPART M: PETROLEUM REFINING AND
CHEMICAL MANUFACTURE**

Section	
216.361	Petroleum and Petrochemical Processes
216.362	Polybasic Organic Acid Partial Oxidation Manufacturing Processes

**SUBPART O: PRIMARY AND FABRICATED
METAL PRODUCTS**

Section	
216.381	Cupolas

Appendix A: Rule into Section Table
Appendix B: Section into Rule Table
Appendix C: Past Compliance Dates

AUTHORITY: Implementing Section 10 and
authorized by Section 27 of the Environmental
Protection Act (Ill. Rev. Stat. 1981, ch. 111
1/2, pars. 1010 and 1027).

SOURCE: Adopted as Chapter 2: Air Pollution,
Rule 206: Carbon Monoxide Emissions, R71-23, 4
PCB 191, April 13, 1972, filed and effective
April 14, 1972; amended at 3 Ill. Reg. 47, p.
92, effective November 8, 1979; amended at 4
Ill. Reg. 24, p. 514, effective June 4, 1980;
codified at 7 Ill. Reg. 13607; amended in R87-18
at 12 Ill. Reg. 20774, effective December 6,
1988.

SUBPART A: GENERAL PROVISIONS

Section 216.100	Scope and Organization

- a) This Part contains standards and limitations
for carbon monoxide emissions from stationary
sources.

- b) Permits for sources subject this Part may be
required pursuant to 35 Ill. Adm. Code 201.

- c) Notwithstanding the provisions of this Part,
the air quality standards contained in 35
Ill. Adm. Code 243 may not be violated.

- d) This Part includes Subparts arranged as
follows:

- 1) Subpart A: General provisions;
- 2) Subparts B-J: Fuel combustion sources
and incinerators;
- 3) Subparts K-M: Reserved for emission
process sources;
- 4) Subparts N-End: Industry and
site-specific rules.

- e) These rules have been grouped for convenience
of the public; the scope of each is
determined by its language and history.

(Source: Added and codified at 7 Ill. Reg.
13607)

Section 216.101 Measurement Methods

Carbon monoxide concentrations in an effluent
stream shall be measured by the non-dispersive
infrared method or by other methods approved by
the Illinois Environmental Protection Agency
(Agency) according to the provisions of 35 Ill.
Adm. Code 201.

**Section 216.102 Abbreviations and Conversion
Factors**

- a) The following abbreviations are used in this
Part:

btu	British thermal unit (60°F)
CO	carbon monoxide
°C	degrees Centigrade
°F	degrees Fahrenheit
kg	kilograms
lbs	pounds
mmbtu/hr	million btu per hour
MW	Megawatts; one million watts
ppm	parts per million

- b) The following conversion factors have been
used in this Part:

English	Metric
1.0 mmbtu/hr	0.293 MW
2.205 lbs	1 kg

(Source: Added and codified at 7 Ill. Reg.
13607)

Section 216.103 Definitions

The definitions contained in 35 Ill. Adm. Code
201 and 211 apply to this Part.

(Source: Added and codified at 7 Ill. Reg.
13607)

Section 216.104 Incorporations by Reference

The following materials are incorporated by reference: non-dispersive infrared method, 40 CFR 60, Appendix A, Method 10 (1982).

(Source: Added and codified at 7 Ill. Reg. 13607)

SUBPART B: FUEL COMBUSTION EMISSION SOURCES

Section 216.121 Fuel Combustion Emission Sources

No person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 Mw (10 mbtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.

Section 216.122 Exception, Midwest Grain Products

The standard for carbon monoxide of Section 216.121 does not apply to emissions from the fluidized bed combustion boiler of Midwest Grain Products of Illinois, located in Pekin, Illinois, where the emission of carbon monoxide shall not exceed 700 parts per million, corrected to 50 percent excess air. Compliance shall be based upon a one-hour average.

(Source: Added at 12 Ill. Reg. 20774, effective December 6, 1988)

SUBPART C: INCINERATORS

Section 216.141 Incinerators

No person shall cause or allow the emission of carbon monoxide into the atmosphere from any incinerator to exceed 500 ppm, corrected to 50 percent excess air.

Section 216.142 Exceptions

Section 216.141 shall not apply to:

- a) Existing incinerators burning less than 907 kg (2000 lbs) of refuse per hour which are in compliance with 35 Ill. Adm. Code 212.181(c).
- b) Existing small explosive waste incinerators which meet the conditions of 35 Ill. Adm. Code 212.184(a).

(Source: Adopted at 4 Ill. Reg. 24, p. 514, effective June 4, 1980)

SUBPART H: PETROLEUM REFINING AND CHEMICAL MANUFACTURE

Section 216.361 Petroleum and Petrochemical Processes

a) No person shall cause or allow the emission of a carbon monoxide waste gas stream into the atmosphere from a petroleum or petrochemical process unless such waste gas stream is burned in a direct flame afterburner or carbon monoxide boiler so that the resulting concentration of carbon monoxide in such waste gas stream is less than or equal to 200 ppm corrected to 50 percent excess air, or such waste gas stream is controlled by other equivalent air pollution control equipment approved by the Agency according to the provisions of 35 Ill. Adm. Code 201.

b) Notwithstanding subsection (a), any existing petroleum or petrochemical process using catalyst regenerators of fluidized catalytic converters equipped for in situ combustion of carbon monoxide, may emit a carbon monoxide waste gas stream into the atmosphere if the carbon monoxide concentration of such waste gas stream is less than or equal to 750 ppm corrected to 50 percent excess air.

c) Notwithstanding subsection (a), any new petroleum or petrochemical process using catalyst regenerators of fluidized catalytic converters equipped for in situ combustion of carbon monoxide, may emit a carbon monoxide waste gas stream into the atmosphere if the carbon monoxide concentration of such waste gas stream is less than or equal to 350 ppm corrected to 50 percent excess air.

Section 216.362 Polybasic Organic Acid Partial Oxidation Manufacturing Processes

No person shall cause or allow the emission of any gases containing carbon monoxide into the atmosphere from any polybasic organic acid partial oxidation manufacturing process unless the total fuel value of the waste gas stream is less than 30 percent of that required for flame incineration of the waste gas stream at 793°C (1460°F) without heat exchange. Polybasic organic acid partial oxidation manufacturing processes not meeting the above conditions shall burn such waste gas stream in a direct flame afterburner to achieve a resulting concentration of carbon monoxide in such waste gas stream of less than or equal to 200 ppm or shall employ such other equivalent control method or equipment as may be approved by the Agency according to the provisions of 35 Ill. Adm. Code 201.

**SUBPART O: PRIMARY AND FABRICATED
METAL PRODUCTS**

Section 216.381 Cupolas

No person shall cause or allow the emission of gases containing carbon monoxide into the atmosphere from any cupola with a manufacturer's rated melt rate in excess of 5 tons per hour, unless such gases are burned in a direct flame afterburner so that the resulting concentration of carbon monoxide in such gases is less than or equal to 200 ppm corrected to 50 percent excess air or such gas streams are controlled by other equivalent pollution control equipment approved by the Agency according to the provisions of 35 Ill. Adm. Code 201.

**Appendix A
Rule into Section Table**

Rule	Section
206(a)	216.121
206(b)	216.141
206(b)(1) and (2)	216.142
206(c)	216.361
206(d)	Deleted
206(e)	216.381
206(f)	216.101
206(g)	Appendix C
206(h)	216.362

**Appendix B
Section into Rule Table**

Section	Rule
216.100	Added in Codification
216.101	206(f)
216.102	Added in Codification
216.103	Added in Codification
216.104	Added in Codification
216.121	206(a)
216.141	206(b)
216.142	206(b)(1) and (2)
216.361	206(c)
216.362	206(h)
216.381	206(e)
Appendix A	Added in Codification
Appendix B	Added in Codification
Appendix C	206(g)

**Appendix C
Past Compliance Dates**

Every owner or operator of a new emission source was required to comply with the standards and limitations of this Part by April 14, 1972.

Every owner or operator of an existing emission source was required to comply with the standards and limitations of this Part by December 31, 1973.

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

CHAPTER 1: POLLUTION CONTROL BOARD

SUBCHAPTER 1C: EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

**PART 217
NITROGEN OXIDES EMISSIONS**

SUBPART A: GENERAL PROVISIONS

Section	
217.100	Scope and Organization
217.101	Measurement Methods
217.102	Abbreviations and Units
217.103	Definitions
217.104	Incorporations by Reference

SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES

Section	
217.121	New Emission Sources

SUBPART C: EXISTING FUEL COMBUSTION EMISSION SOURCES

Section	
217.141	Existing Emission Sources in Major Metropolitan Areas

SUBPART K: PROCESS EMISSION SOURCES

Section	
217.301	Industrial Processes

SUBPART O: CHEMICAL MANUFACTURE

Section	
217.381	Nitric Acid Manufacturing Processes

SUBPART V: ELECTRIC POWER GENERATION

Section	
217.521	Lake of Egypt Power Plant

Appendix A: Rule into Section Table
Appendix B: Section into Rule Table
Appendix C: Past Compliance Dates

AUTHORITY: Implementing Section 10 and authorized by Section 27 of the Environmental Protection Act (III, Rev. Stat. 1981, ch. 111 1/2, pars. 1010 and 1027).

SOURCE: Adopted as Chapter 2: Air Pollution, Rule 207: Nitrogen Oxides Emissions, R71-23, 4 PCB 191, April 13, 1972, filed and effective April 14, 1972; amended at 2 III. Reg. 17, p. 101, effective April 13, 1978; codified at 7 III. Reg. 13609.

SUBPART A: GENERAL PROVISIONS

Section 217.100	Scope and Organization

a) This Part sets standards and limitations for emission of oxides of nitrogen from stationary sources.

b) Permits for sources subject to this Part may be required pursuant to 35 Ill. Adm. Code 201.

c) Notwithstanding the provisions of this Part, the air quality standards contained in 35 Ill. Adm. Code 243 may not be violated.

d) This Part is divided into Subparts which are grouped as follows:

- 1) Subpart A: General provisions;
- 2) Subparts B-J: Fuel combustion sources and incinerators;
- 3) Subparts K-M: Process emission sources;
- 4) Subparts N-End: Industry and site-specific rules.

e) These rules have been grouped for convenience of the public; the scope of each is determined by its language and history.

(Source: Added and codified at 7 III. Reg. 13609)

Section 217.101 Measurement Methods

Measurement of nitrogen oxides shall be according to the phenol disulfonic acid method as published in 36 Fed. Reg. 15718, Method 7.

Section 217.102 Abbreviations and Units

a) The following abbreviations are used in this Part:

btu	British thermal unit (60°F)
kg	kilogram
kg/MW-hr	kilograms per megawatt-hour, usually used as an hourly emission rate
lb	pound
NO _x	Nitrogen Oxides
lbs/MMBtu	pounds per million btu, usually used as an hourly emission rate
Mg	megagram or metric tonne
MMBtu	million British thermal units
MMBtu/hr	million British thermal units per hour
MW	megawatt; one million watts
MW-hr	megawatt-hour
ppm	parts per million
ppmv	parts per million by volume
T	English ton

b) The following conversion factors have been used in this Part:

English	Metric
2,205 lb	1 kg
1 T	0.907 Mg
1 lb/T	0.500 kg/Mg
MMBtu/hr	0.293 MW
1 lb/MMBtu	1.548 kg/MW-hr

(Source: Added and codified at 7 III. Reg. 13609)

Section 217.103 Definitions.

The definitions contained in 35 Ill. Adm. Code 201 and 211 apply to this Part.

(Source: Added and codified at 7 Ill. Reg. 13609)

Section 217.104 Incorporations by Reference

The following materials are incorporated by reference: phenol disulfonic acid method, 36 Fed. Reg. 15718, Method 7.

(Source: Added and codified at 7 Ill. Reg. 13609)

SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES

Section 217.121 New Emission Sources

No person shall cause or allow the emission of nitrogen oxides (NO_x) into the atmosphere in any one hour period from any new fuel combustion emission source with an actual heat input equal to or greater than 73.2 MW (250 mbtu/hr) to exceed the following standards and limitations:

- For gaseous fossil fuel firing, 0.310 kg/MW-hr (0.20 lbs/mbtu) of actual heat input;
- For liquid fossil fuel firing, 0.464 kg/MW-hr (0.30 lbs/mbtu) of actual heat input;
- For dual gaseous and liquid fossil fuel firing, 0.464 kg/MW-hr (0.30 lbs/mbtu) of actual heat input;
- For solid fossil fuel firing, 1.08 kg/MW-hr (0.7 lbs/mbtu) of actual heat input;
- For fuel combustion emission sources burning simultaneously any combination of solid, liquid and gaseous fossil fuels, an allowable emission rate shall be determined by the following equation:

$$E = (AG + BL + CS) Q$$

Where:

- E = Allowable nitrogen oxides emissions rate
Q = Actual heat input derived from all fossil fuels
G = Percent of actual heat input derived from gaseous fossil fuel
L = Percent of actual heat input derived from liquid fossil fuel
S = Percent of actual heat input derived from solid fossil fuel

$$G + L + S = 100.0$$

and, where A, B, C and appropriate metric and English units are determined from the following table:

Metric English

E	kg/hr	lbs/hr
Q	MW	mbtu/hr
A	0.023	0.003
B	0.023	0.003
C	0.053	0.007

SUBPART C: EXISTING FUEL COMBUSTION EMISSION SOURCES

Section 217.141 Existing Emission Sources in Major Metropolitan Areas

No person shall cause or allow the emission of nitrogen oxides into the atmosphere in any one hour period from any existing fuel combustion emission source with an actual heat input equal to or greater than 73.2 MW (250 mbtu/hr), located in the Chicago or St. Louis (Illinois) major metropolitan areas to exceed the following limitations:

- For gaseous and/or liquid fossil fuel firing, 0.46 kg/MW-hr (0.3 lbs/mbtu) of actual heat input;
- For solid fossil fuel firing, 1.39 kg/MW-hr (0.9 lbs/mbtu) of actual heat input;
- For fuel combustion emission sources burning simultaneously any combination of solid, liquid and gaseous fuel, the allowable emission rate shall be determined by the following equation:

$$E = (AG + BL + CS) Q$$

where:

- E = Allowable nitrogen oxides emissions
Q = Actual heat input
G = Percent of actual heat input derived from gaseous fossil fuel
L = Percent of actual heat input derived from liquid fossil fuel
S = Percent of actual heat input derived from solid fossil fuel

$$G + L + S = 100.0$$

and, where A, B, C and appropriate metric and English units are determined from the following table:

Metric English

E	kg/hr	lbs/hr
Q	MW	mbtu/hr
A	0.023	0.003
B	0.023	0.003
C	0.068	0.009

- Exceptions: This rule shall not apply to existing fuel combustion sources which are either cyclone fired boilers burning solid or liquid fuel, or horizontally opposed fired boilers burning solid fuel.

SUBPART K: PROCESS EMISSION SOURCES

Section 217.301 Industrial Processes

- a) **New Industrial Processes.** No person shall cause or allow the emission of nitrogen oxides into the atmosphere from any new process producing products of organic nitrations and/or oxidations using nitric acid to exceed the following standards and limitations:
- 1) 2.5 kg of nitrogen oxides (expressed as nitrogen dioxide) per metric tonne of nitric acid (100 percent acid basis) used in such new process (5.0 lbs/T).
 - 2) Visible emissions in excess of 5 percent opacity.
- b) **Existing Industrial Processes.** No person shall cause or allow the emission of nitrogen oxides into the atmosphere from any existing process producing products of organic nitrations and/or oxidations using nitric acid to exceed 5.0 kg of nitrogen oxides (expressed as nitrogen dioxide) per metric tonne of nitric acid (100 percent acid basis) used in such process (10.0 lbs/T).
- c) **Exemption.** Subsections (a) and (b) of this rule shall not apply to any industrial process using less than 90.7 metric tonnes (100 tons) of nitric acid (100 percent acid basis) annually or which produces less than 907 kg (1 ton) of nitrogen oxides (expressed as nitrogen dioxide) per year.

SUBPART O: CHEMICAL MANUFACTURE

Section 217.381 Nitric Acid Manufacturing Processes

- a) **New Weak Nitric Acid Processes.** No person shall cause or allow the emission of nitrogen oxides into the atmosphere from any new weak nitric acid manufacturing process to exceed the following standards and limitations:
- 1) 1.5 kg of nitrogen oxides (expressed as nitrogen dioxide) per metric tonne of acid produced (100 percent acid basis) (3.0 lbs/T);
 - 2) Visible emissions in excess of 5 percent opacity;
 - 3) 0.05 kg of nitrogen oxides (expressed as nitrogen dioxide) per metric tonne of acid produced (100 percent acid basis) from any acid storage tank vents (0.1 lbs/T).
- b) **Existing Weak Nitric Acid Processes.** No person shall cause or allow the emission of nitrogen oxides into the atmosphere from any existing weak nitric acid manufacturing process to exceed the following standards and limitations:

1) 2.75 kg of nitrogen oxides (expressed as nitrogen dioxide) per metric tonne of acid produced (100 percent acid basis) (5.5 lbs/T);

2) Visible emissions in excess of 5 percent opacity;

3) 0.1 kg of nitrogen oxides (expressed as nitrogen dioxide) per metric tonne of acid produced (100 percent acid basis) from any acid storage tank vents (0.2 lbs/T).

c) **Concentrated Nitric Acid Processes.** No person shall cause or allow the emission of nitrogen oxides into the atmosphere from any concentrated nitric acid manufacturing process to exceed the following standards and limitations:

1) 1.5 kg of nitrogen oxides (expressed as nitrogen dioxide) per metric tonne of acid produced (100 percent acid basis) (3.0 lbs/T);

2) 225 ppm of nitrogen oxides (expressed as nitrogen dioxide) in any effluent gas stream emitted into the atmosphere;

3) Visible emissions in excess of 5 percent opacity.

d) **Nitric Acid Concentrating Processes.** No person shall cause or allow the emission of nitrogen oxides into the atmosphere from any nitric acid concentrating process to exceed the following limitations:

1) 1.5 kg of nitrogen oxides (expressed as nitrogen dioxide) per metric tonne of acid produced (100 percent acid basis) (3.0 lbs/T);

2) Visible emissions in excess of 5 percent opacity.

SUBPART V: ELECTRIC POWER GENERATION

Section 217.521 Lake of Egypt Power Plant

a) The standard for nitrogen oxides of Section 217.121(d) does not apply when solid fossil fuel containing 25 percent by weight or more of coal refuse is burned in Southern Illinois Power Cooperative's Unit No. 4 at its Lake of Egypt Power Plant.

b) The standard for nitrogen oxides of Section 217.121(e) does not apply when solid fossil fuel containing 25 percent by weight or more of coal refuse is burned in combination with gaseous, liquid or other solid fossil fuel in Southern Illinois Power Cooperative's Unit No. 4 at its Lake of Egypt Power Plant.

(Source: Amended at 2 Ill. Reg. 17, p. 101, effective April 13, 1978)

**Appendix A
Rule into Section Table**

Rule	Section
207(a)(1)	217.121(a)
207(a)(2)	217.121(b)
207(a)(3)	217.121(c)
207(a)(4)	217.121(d)
	217.521(a)
207(a)(5)(A)	217.121(e)
207(a)(5)(B)	217.521(b)
207(b)	217.141(a)-(c)
207(c)	217.141(d)
207(d)	217.381
207(e)	217.381
207(f)	217.101
207(g)	Appendix C

**Appendix B
Section into Rule Table**

Section	Rule
217.100	Added in Codification
217.101	207(f)
217.102	Added in Codification
217.103	Added in Codification
217.104	Added in Codification
217.121	207(a)(1)-(4).
	207(a)(5)(A)
217.141	207(b) and 207(c)
217.381	207(e)
217.381	207(d)
217.521	207(a)(4).
	207(a)(5)(B)
Appendix A	Added in Codification
Appendix B	Added in Codification
Appendix C	207(g)

**Appendix C
Past Compliance Dates**

Every owner or operator of a new emission source was required to comply with the standards and limitations of this Part by April 14, 1972.

Except as otherwise provided in the next paragraph, every owner or operator of an existing emission source was required to comply with the standards and limitations of this Part by December 31, 1973.

Every owner or operator of an existing coal fired fuel combustion emission source was required to comply with the applicable standards and limitations of this Part by May 30, 1975.

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

CHAPTER 1: POLLUTION CONTROL BOARD

**SUBCHAPTER C: EMISSION STANDARDS AND
LIMITATIONS FOR STATIONARY SOURCES**

**PART 228
ASBESTOS**

SUBPART A: GENERAL PROVISIONS

Section	
228.101	Authority
228.102	Policy
228.103	Definitions
228.104	Incorporations by Reference

SUBPART B: GENERAL REQUIREMENTS

Section	
228.121	Prohibition
228.122	Permit for Manufacture

**SUBPART C: CONSTRUCTION, ALTERATION
AND REPAIR OF STRUCTURE**

Section	
228.131	Spray Asbestos Prohibited
228.132	Non-asbestos Spray Insulation
228.133	Enclosure for Asbestos Construction
228.134	No Visible Emission
228.135	Preclude Exposure to Circulating Air

SUBPART D: DEMOLITION

Section	
228.141	Necessary and Practicable Safeguards

SUBPART E: MANUFACTURING

Section	
228.151	Emission Standards; Sampling and Counting Procedures
228.152	Venting of all Emissions to Central Sources Inspection
228.154	Monitoring and Reporting
228.155	Process Wastewater Effluent Criteria
228.156	Sludge Disposal
228.157	Transportation of Asbestos-containing Products
228.158	No Visible Emission

SUBPART F: LOCAL ENFORCEMENT

Section	
228.161	Obligation to Enforce

Appendix A Rule Into Section Table
Appendix B Section into Rule Table
Appendix C Past Compliance Dates

AUTHORITY: Implementing Section 10 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1010 and 1027).

SOURCE: Adopted as Chapter V: Hazardous Substances, Title I, Asbestos and Spray Insulation and Fireproofing, R71-16, J PCB 461, January 6, 1972, filed and effective January 24,

1972; Renumbered to Chapter 2: Air Pollution, Part VI: Asbestos and Spray Insulation and Fireproofing, R72-10, filed and effective June 27, 1975; codified at 7 Ill. Reg. 13611.

SUBPART A: GENERAL PROVISIONS

Section 228.101 Authority

Pursuant to the authority in Sections 9, 10 and 13 of the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1001 et seq.) (Act) which empower the Pollution Control Board (Board) to adopt regulations forbidding the "sale, offer, or use for reasons of air pollution control" of any article, and to set "standards specifying the maximum amounts or concentrations of various contaminants that may be discharged into the atmosphere;" and to set standards for the issuance of permits for the operation of any equipment or facility capable of causing or contributing to air pollution; and to promulgate "conditions regarding the...use of any...article determined by the Board to constitute an air pollution hazard;" and to adopt effluent standards limiting the amounts of contaminants that may be discharged into the water of Illinois, the Board adopts the following rules and regulations.

Section 228.102 Policy

a) It is the purpose of the General Assembly in adopting the Act to maintain and enhance the purity of the air and water of Illinois in order to protect health, welfare and the quality of life. Accordingly, it is hereby determined that the uncontrolled discharge of asbestos fiber into the environment tends to severely endanger the public health and welfare and that the uncontrolled spraying of fiber-containing materials unreasonably interferes with the enjoyment of life and property.

b) It is the purpose of these regulations to control the amount of asbestos fiber released into the environment from the major sources of emission. Such control is necessary not only to protect those members of the public who are in proximity to heavy concentrations of asbestos fiber but also to safeguard the health of future generations endangered by the continuous discharge of asbestos fiber which can be toxic and which tends to be cumulative both in the atmosphere and in the human body.

c) Where health can be protected by the adoption of an emission standard or of procedural safeguards, such a course has been pursued. In those instances where restriction is unfeasible because of the unusual nature of the emission source (spray asbestos at construction sites) a product ban has been resorted to. This prohibition has been made with full consideration given to the available alternative materials.

- d) It is also the purpose of these regulations to reduce the emission of non-asbestos particulate from spray-fireproofing and insulation. To protect against these emissions, the biological effects of which are unknown, procedural safeguards have been enacted.

Section 228.103 Definitions

The terms which appear in this Part have the definitions specified in this Part and 35 Ill. Adm. Code 201 and 211.

"Asbestos": any fiber or any mixture containing fiber of hydrated silicate mineral, which, on the basis of its crystalline structure, falls into one of two categories:

- a) Pyroxenes - chrysotile fiber; or
- b) Amphiboles - crocidolite, amosite, tremolite, actinolite or anthophyllite fiber.

"Commercial Activity": any activity done for hire or having financial profit as a primary aim.

"Debris": asbestos-containing waste produced by the demolition of a structure.

"Spraying": the pneumatic application of material used for fireproofing or insulation.

"Waste": any asbestos-containing matter which has been or is intended to be discarded.

Section 228.104 Incorporations by Reference

The following materials are incorporated by reference:

- a) ASME Power Test Code 27-1957, American Society of Mechanical Engineers, United Engineering Center, 345 E. 47th Street, New York, New York 10017.
- b) Edwards, G.H., and Lynch, J.R., "The Method Used by the U.S. Public Health Service for Enumeration of Asbestos Dust on Membrane Filters," Ann. Occupational Hyg. (Oxford), 11(1):1-6, January, 1968.

(Source: Added and codified at 7 Ill. Reg. 13611)

SUBPART B: GENERAL REQUIREMENTS

Section 228.121 Prohibition

No commercial activity, not otherwise hereinafter prohibited, involving the potential discharge of visible amounts of asbestos fiber or asbestos-containing materials into the ambient air from the construction, alteration, repair or demolition of a structure or from the processing or manufacturing of asbestos-containing products, shall be conducted unless the person or entity in charge of such activity complies with the following regulations:

- a) Personnel shall be designated to exercise full-time supervisory authority over all aspects of the activity from which the release of asbestos fiber into the environment could result, in such a manner as to insure compliance with the pertinent asbestos control regulations.

- b) Each employee engaged in such activity shall complete a course of instruction on the potential hazards of exposure to asbestos fiber, including the precautions that must be observed to prevent or restrict the dispersion of asbestos fiber into the environment.

- c) Facilities shall be provided and procedures instituted and supervised that prevent the removal from the site of visible amounts of asbestos-containing material on the clothing of the employees.

- d) Asbestos-containing wastes shall be immediately vacuumed or otherwise collected where vacuuming is impossible, and shall be placed in a container resistant to tearing or breaking under normal handling conditions, which shall be tightly sealed and clearly marked as containing asbestos waste. Such containers shall be placed directly upon a vehicle for disposal by burial at a sanitary landfill. Exception: This subsection (d) shall not apply to the demolition of a structure, except as provided in Section 228.141(d) and (e) or to the disposal of sludge waste except as provided in Section 228.156.

Section 228.123 Permit for Manufacture

The manufacturing or processing of asbestos-containing products is prohibited unless the person or entity in charge of such activity has obtained a permit from the Illinois Environmental Protection Agency (Agency). Before obtaining such permit the applicant shall demonstrate compliance with Section 228.121 and such additional standards as are hereinafter specifically required.

SUBPART C: CONSTRUCTION, ALTERATION AND REPAIR OF A STRUCTURE

Section 228.131 Spray Asbestos Prohibited

The spraying of asbestos-containing material is prohibited.

Section 228.132 Non-asbestos Spray Insulation

Non-asbestos fibrous matter shall not be sprayed in an area open to the atmosphere unless the following procedures are taken:

- a) The entire floor or area to be sprayed shall be enclosed with plastic or plastic-coated tarpaulins in a manner which shall preclude the escape of fiber-containing material from the enclosure. All interior open areas such

as elevator shafts and stairwells shall be enclosed in a manner which shall prevent the escape of fiber-containing material from the working area.

- b) The entire sprayed area, all ledges and surfaces including tarpaulins within the enclosure shall be thoroughly vacuumed upon completion of the spraying operation and immediately before the enclosure is dismantled.

Section 228.132 Enclosure for Asbestos Construction

- a) The cutting, trimming, fitting or stripping of asbestos-containing material in the construction, alteration or repair of a structure which is done at the site of such structure in an area open to the atmosphere shall be conducted within a special enclosure designed to preclude the escape of asbestos fiber from the immediate area of such enclosure.
- b) The mechanical exhaustion of dust from such enclosure to the ambient air is prohibited unless such exhaust system is equipped with a properly sized fabric filter for dust collection or an equivalent device as approved by the Agency.

Section 228.134 No Visible Emission

Compliance with Sections 228.132 and 228.133 notwithstanding, visible emissions of fiber-containing material in an area open to the atmosphere shall be considered a violation.

Section 228.135 Preclude Exposure to Circulating Air

Asbestos-containing material applied in the construction, alteration or repair of a structure shall be coated with a sealant, provided with a cover or installed in some other manner so as to preclude emission of the asbestos-containing material to the circulating air. Any plenum or other structure coated with or containing asbestos-containing insulation and used in the circulation of air in a building shall be thoroughly cleaned of all debris and waste insulation.

SUBPART D: DEMOLITION

Section 228.141 Necessary and Practicable Safeguards

Where the risk of public exposure to asbestos fiber from the dislodging of asbestos-containing materials is present, no demolition of a structure shall be initiated unless all safeguards necessary and practicable to reduce the emission of dust are taken. Such procedures shall include, but are not necessarily limited to:

- a) Boilers and pipes and steel members insulated or fireproofed with asbestos-containing material shall be wetted and stripped before toppling of walls is begun. This procedure shall be followed, where practicable, as to all other asbestos-lined surfaces. Such asbestos waste shall be immediately bagged and disposed of in accordance with Section 228.121(d).
- b) When demolition by toppling occurs such reasonable enclosure for dust emission control as is compatible with the character of the structure shall be employed.
- c) Before the demolition or toppling of any section of wall of the structure, adequate wetting to suppress the dust shall be employed.
- d) Asbestos-containing debris shall not be dropped or thrown from any floor but shall be transported by dust-tight chutes or buckets. Asbestos-containing debris in chutes or buckets shall be sufficiently wetted to preclude dust dispersion at the point of discharge.
- e) All asbestos-containing debris shall be thoroughly wetted before loading into trucks, other vehicles or containers. During transport such waste shall be enclosed or covered so as to prevent dust dispersion. Asbestos-containing debris shall be disposed by burial at a sanitary landfill.

SUBPART E: MANUFACTURING

Section 228.151 Emission Standards; Sampling and Counting Procedures

A factory, plant or enterprise which engages in the processing or manufacturing of any asbestos-containing product shall discharge no visible emission of particulate matter from such manufacturing or processing into the ambient air and shall emit no concentrations of asbestos fiber into the ambient air in excess of 2 fibers per cubic centimeter of air.

- a) Sampling of emissions shall be by the membrane filter method and according to the procedures recommended in the ASME Power Test Code 27-1957, or other procedures generally accepted by persons knowledgeable in the state of the art.
- b) Counting shall be according to the procedure outlined in Edwards, G.M., and Lynch, J.R., "The Method Used by the U.S. Public Health Service for Enumeration of Asbestos Dust on Membrane Filters," Ann. Occupational Hyg. (Oxford), 11(1): 1-6 Jan. 1968, with 20 fields per sample, counted at random using phase contrast microscopy at 430 x magnification and counting only fibers 5 microns or greater in length, with a length to breadth ratio of 3 to 1 or greater.

Section 228.152 Venting of all Emissions to Central Sources

Any factory, plant or enterprise which engages in the processing or manufacturing of any asbestos-containing product shall control all asbestos handling facilities so that exhaust air can be ducted through necessary air pollution control equipment and samples taken of the gases which are emitted into the ambient air.

Section 228.153 Inspection

Any factory, plant or enterprise for which a permit is sought or has been granted pursuant to Section 228.123 shall be subject to inspection by the Agency at any reasonable time, without prior notice.

Section 228.154 Monitoring and Reporting

At a frequency to be determined by the Agency, any factory, plant or enterprise which engages in the processing or manufacturing of any asbestos-containing product shall sample the exhaust from such factory, plant or enterprise and submit the emission data to the Agency.

Section 228.155 Process Wastewater Effluent Criteria

A factory, plant or enterprise the manufacturing processes of which add asbestos fiber to water shall not discharge such process wastewater to the sewers or waters of Illinois unless such process wastewater is given the best available treatment consistent with technological feasibility and economic reasonableness.

Section 228.156 Sludge Disposal

Waste sludge containing asbestos and collected from settling ponds shall be enclosed during transport and shall be disposed by burial at a sanitary landfill.

Section 228.157 Transportation of Asbestos-containing Products

No product which may emit asbestos fiber during its transportation shall be transported unless such product is enclosed so as to preclude the emission of asbestos fiber into the ambient air.

Section 228.158 No Visible Emission

Notwithstanding compliance with Sections 228.156 and 228.157 the visible emission of particulate matter in the course of such transportation shall be considered a violation.

SUBPART F: LOCAL ENFORCEMENT

Section 228.161 Obligation to Enforce

It shall be the obligation of local governments as well as the Agency to enforce by appropriate means the requirements of Sections 228.121 and 228.156 through 228.158.

**Appendix A
Rule into Section Table**

Rule	Section
601.....	228.101
602.....	228.102
603.....	228.103
627.....	228.121
622.....	228.133
631.....	228.131
632.....	228.132
633.....	228.133
634.....	228.134
635.....	228.135
641.....	228.141
651.....	228.151
652.....	228.152
653.....	228.153
654.....	228.154
655.....	228.155
656.....	228.156
657.....	228.157
658.....	228.158
661.....	228.161

**Appendix B
Section into Rule Table**

Section	Rule
228.101.....	601
228.102.....	602
228.103.....	603
228.104.....	Added in Codification
228.121.....	621
228.123.....	622
228.131.....	631
228.132.....	632
228.133.....	633
228.134.....	634
228.135.....	635
228.141.....	641
228.151.....	651
228.152.....	652
228.153.....	653
228.154.....	654
228.155.....	655
228.156.....	656
228.157.....	657
228.158.....	658
228.161.....	661

Section	Rule
Appendix A.....	Added in Codification
Appendix B.....	Added in Codification
Appendix C.....	621, 631, 651

**Appendix C
Past Compliance Dates**

Rule 621

After June 30, 1972 commercial activities involving potential discharge of asbestos from the construction, alteration, repair or demolition of a structure or from the processing or manufacturing of asbestos-containing products were prohibited except in compliance with certain requirements.

Rule 631

The spraying of asbestos-containing material was prohibited after March 31, 1972.

Rule 651

After June 30, 1972, factories, plants or enterprises engaged in processing or manufacturing of any asbestos-containing product were prohibited from discharging visible emissions of particulate matter or concentrations of asbestos fiber in excess of 2 per cubic centimeter.

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

CHAPTER I: POLLUTION CONTROL BOARD

SUBCHAPTER c: PEREMPTORY RULES

**PART 230
NEW SOURCE PERFORMANCE STANDARDS**

SUBPART A: GENERAL PROVISIONS

Section
230.110 General Provisions

SUBPART D: STEAM GENERATORS

Section
230.140 Fossil-Fuel Fired Steam Generators
for which Construction is Commenced
after August 17, 1971
230.141 Electric Utility Steam Generating
Units for which Construction is
Commenced after September 18, 1978
230.142 Industrial-Commercial-Institutional
Steam Generating Units for which
Construction is Commenced after June
19, 1984

SUBPART E: INCINERATORS

Section
230.150 Incinerators

SUBPART F: PORTLAND CEMENT PLANTS

Section
230.160 Portland Cement Plants

SUBPART G: NITRIC ACID PLANTS

Section
230.170 Nitric Acid Plants

SUBPART H: SULFURIC ACID PLANTS

Section
230.180 Sulfuric Acid Plants

SUBPART I: ASPHALT CONCRETE PLANTS

Section
230.190 Asphalt Concrete Plants

SUBPART J: PETROLEUM REFINERIES

Section
230.200 Petroleum Refineries

**SUBPART K: STORAGE VESSELS FOR
PETROLEUM LIQUIDS**

Section
230.210 Storage Vessels for Petroleum Liquids
Constructed after June 11, 1973 and
Prior to May 19, 1978
230.211 Storage Vessels for Petroleum Liquids
Constructed after May 18, 1978

SUBPART L: SECONDARY LEAD SMELTERS

Section
230.220 Secondary Lead Smelters

**SUBPART M: SECONDARY BRASS AND BRONZE
INGOT PRODUCTION PLANTS**

Section
230.230 Secondary Brass and Bronze Ingot
Production Plants

SUBPART N: BASIC OXYGEN PROCESS FURNACES

Section
230.240 Primary Emissions from Basic Oxygen
Process Furnaces Constructed after
June 11, 1973
230.241 Secondary Emissions from Basic Oxygen
Process Steelmaking Facilities
Constructed after January 20, 1983

SUBPART O: SEWAGE TREATMENT PLANTS

Section
230.250 Sewage Treatment Plants

SUBPART P: PRIMARY COPPER SMELTERS

Section
230.260 Primary Copper Smelters

SUBPART Q: PRIMARY ZINC SMELTERS

Section
230.270 Primary Zinc Smelters

SUBPART R: PRIMARY LEAD SMELTERS

Section
230.280 Primary Lead Smelters

**SUBPART S: PRIMARY ALUMINUM
REDUCTION PLANTS**

Section
230.290 Primary Aluminum Reduction Plants

**SUBPART T: THE PHOSPHATE FERTILIZER
INDUSTRY: WET-PROCESS PHOSPHORIC
ACID PLANTS**

Section
230.300 Phosphate Fertilizer Industry:
Wet-Process Phosphoric Acid Plants

**SUBPART U: THE PHOSPHATE FERTILIZER
INDUSTRY: SUPERPHOSPHORIC ACID PLANTS**

Section
230.310 Phosphate Fertilizer Industry:
Superphosphoric Acid Plants

**SUBPART V: THE PHOSPHATE FERTILIZER
INDUSTRY: DIAMMONIUM PHOSPHATE PLANTS**

Section
230.320 Phosphate Fertilizer Industry:
Diammonium Phosphate Plants

**SUBPART W: THE PHOSPHATE FERTILIZER
INDUSTRY: TRIPLE SUPERPHOSPHATE PLANTS**

Section
230.330 Phosphate Fertilizer Industry:
Triple Superphosphate Plants

**SUBPART X: THE PHOSPHATE FERTILIZER
INDUSTRY: GRANULAR TRIPLE SUPERPHOSPHATE
STORAGE FACILITIES**

Section
230.340 Phosphate Fertilizer Industry:
Granular Triple Superphosphate
Storage Facilities

SUBPART Y: COAL PREPARATION PLANTS

230.350 Coal Preparation Plants

SUBPART Z: FERROALLOY PRODUCTION FACILITIES

Section
230.360 Ferroalloy Production Facilities

**SUBPART AA: STEEL PLANTS: ELECTRIC
ARC FURNACES**

Section
230.370 Steel Plants: Electric Arc Furnaces

**SUBPART AAa: STEEL PLANTS - ELECTRIC ARC
FURNACES AND ARGON-OXYGEN DECARBURIZATION
VESSELS CONSTRUCTED AFTER AUGUST 17, 1983**

Section
230.371 Steel Plants - Electric Arc Furnaces
and Argon-Oxygen Decarburization
Vessels Constructed After August 17,
1983

SUBPART BB: KRAFT PULP MILLS

Section
230.380 Kraft Pulp Mills

SUBPART CC: GLASS MANUFACTURING PLANTS

Section
230.390 Glass Manufacturing Plants

SUBPART DD: GRAIN ELEVATORS

Section
230.400 Grain Elevators

**SUBPART EE: SURFACE COATING OF
METAL FURNITURE**

Section
230.410 Surface Coating of Metal Furniture

SUBPART GG: STATIONARY GAS TURBINES

Section
230.430 Stationary Gas Turbines

SUBPART HH: LIME MANUFACTURING PLANTS

Section
230.440 Lime Manufacturing Plants

**SUBPART KK: LEAD-ACID BATTERY
MANUFACTURING PLANTS**

Section
230.470 Lead-Acid Battery Manufacturing Plants

SUBPART LL: METALLIC MINERAL PROCESSING PLANT

Section
230.480 Metallic Mineral Processing Plants

**SUBPART MM: AUTOMOBILE AND LIGHT-DUTY
TRUCK SURFACE COATING OPERATIONS**

Section
230.490 Automobile and Light-Duty Truck
Surface Coating Operations

SUBPART NN: PHOSPHATE ROCK PLANTS

Section
230.500 Phosphate Rock Plants

SUBPART PP: AMMONIUM SULFATE MANUFACTURE

Section
230.520 Ammonium Sulfate Manufacture

**SUBPART QQ: GRAPHIC ARTS INDUSTRY:
PUBLICATION ROTOGRAVURE PRINTING**

Section
230.530 Graphic Arts Industry: Publication
Rotogravure Printing

**SUBPART RR: PRESSURE SENSITIVE TAPE
AND LABEL SURFACE COATING OPERATIONS**

Section
230.540 Pressure Sensitive Tape and Label
Surface Coating Operations

**SUBPART SS: INDUSTRIAL SURFACE COATING:
LARGE APPLIANCES**

Section
230.550 Industrial Surface Coating: Large
Appliances

**SUBPART TT: METAL COIL SURFACE
COATING OPERATIONS**

Section
230.560 Metal Coil Surface Coating Operations

**SUBPART UU: ASPHALT PROCESSING AND
ASPHALT ROOFING MANUFACTURE**

Section
230.570 Asphalt Processing and Asphalt
Roofing Manufacture

**SUBPART VV: EQUIPMENT LEAKS OF VOC IN THE
SYNTHETIC ORGANIC CHEMICALS
MANUFACTURING INDUSTRY**

Section
230.580 Equipment Leaks of VOC in the
Synthetic Organic Chemicals
Manufacturing Industry

**SUBPART MM: BEVERAGE CAN SURFACE
COATING INDUSTRY**

Section
230.590 Beverage Can Surface Coating Industry

SUBPART XX: BULK GASOLINE TERMINALS

Section
230.600 Bulk Gasoline Terminals

**SUBPART FFF: FLEXIBLE VINYL AND
URETHANE COATING AND PRINTING**

Section
230.680 Flexible Vinyl and Urethane Coating
and Printing

**SUBPART GGG: EQUIPMENT LEAKS OF
VOC IN PETROLEUM
REFINERIES**

Section
230.690 Equipment Leaks of VOC in Petroleum
Refineries

**SUBPART NHH: SYNTHETIC FIBER
PRODUCTION FACILITIES**

Section
230.700 Synthetic Fiber Production Facilities

**SUBPART KKK: EQUIPMENT LEAKS OF
VOC FROM ONSHORE
NATURAL GAS PROCESSING PLANTS**

Section
230.730 Equipment Leaks of VOC from Onshore
Natural Gas Processing Plants

**SUBPART LLL: ONSHORE NATURAL GAS PROCESSING:
SO₂ EMISSIONS**

Section
230.740 Onshore Natural Gas Processing: SO₂
Emissions

**SUBPART OOO: NONMETALLIC MINERAL
PROCESSING PLANTS**

Section
230.770 Nonmetallic Mineral Processing Plants

**SUBPART PPP: WOOL FIBERGLASS INSULATION
MANUFACTURING PLANTS**

Section
230.780 Wool Fiberglass Insulation
Manufacturing Plants

Table A Rule into Section Table
Table B Section into Rule Table

Appendix A Reference Methods
Appendix B Performance Specifications
Appendix C Determination of Emission Rate Change
Appendix F Quality Assurance Procedures

AUTHORITY: Implementing and authorized by
Section 9.1(c) of the Environmental Protection

Act (111. Rev. Stat. 1981, ch. 111 1/2, par.
1089.1(c)).

SOURCE: Peremptory rule adopted at 3 Ill. Reg. 285, effective November 28, 1979; peremptory rule adopted at 4 Ill. Reg. 9, p. 255, effective February 20, 1980; peremptory amendment at 4 Ill. Reg. 15, p. 1, effective March 30, 1980; peremptory amendment at 4 Ill. Reg. 23, p. 124, effective May 27, 1980; peremptory amendment at 4 Ill. Reg. 36, p. 159, effective August 25, 1980; peremptory amendment at 5 Ill. Reg. 1903, effective February 17, 1981; peremptory amendment at 5 Ill. Reg. 14205, effective December 3, 1981; peremptory amendment at 6 Ill. Reg. 3263, effective March 11, 1982; peremptory amendment at 6 Ill. Reg. 6072, effective May 7, 1982; peremptory amendment at 6 Ill. Reg. 16806, effective August 18, 1982; peremptory amendment at 6 Ill. Reg. 14572, effective November 5, 1982; peremptory amendment at 6 Ill. Reg. 15041, effective November 29, 1982; peremptory amendment at 6 Ill. Reg. 15587, effective December 9, 1982; peremptory amendment at 7 Ill. Reg. 976, effective January 10, 1983; peremptory amendment at 7 Ill. Reg. 3029, effective March 7, 1983; peremptory amendment at 7 Ill. Reg. 3227, effective March 14, 1983; peremptory amendment at 7 Ill. Reg. 6978, effective May 12, 1983; peremptory amendment at 7 Ill. Reg. 8001, effective June 21, 1983; peremptory amendment at 7 Ill. Reg. 13700, effective September 29, 1983; codified at 7 Ill. Reg. 13614; peremptory amendment at 7 Ill. Reg. 17021, effective December 8, 1983; peremptory amendment at 7 Ill. Reg. 17460, effective December 20, 1983; peremptory amendment at 8 Ill. Reg. 2206, effective February 2, 1984; peremptory amendment at 8 Ill. Reg. 3042, effective February 27, 1984; peremptory amendment at 8 Ill. Reg. 5715, effective April 16, 1984; peremptory amendment at 8 Ill. Reg. 6832, effective May 1, 1984; peremptory amendment at 8 Ill. Reg. 7927, effective May 22, 1984; peremptory amendment at 8 Ill. Reg. 10075, effective June 20, 1984; peremptory amendment at 8 Ill. Reg. 14665, effective August 1, 1984; peremptory amendment at 8 Ill. Reg. 24320, effective November 29, 1984; peremptory amendment at 9 Ill. Reg. 8539, effective February 22, 1985; peremptory amendment at 9 Ill. Reg. 8884, effective May 28, 1985; corrected at 9 Ill. Reg. 9587; peremptory amendment at 9 Ill. Reg. 10289, effective June 24, 1985; peremptory amendment at 9 Ill. Reg. 13377, effective August 20, 1985; peremptory amendment at 9 Ill. Reg. 17037, effective October 18, 1985; peremptory amendment at 9 Ill. Reg. 20929, effective December 16, 1985; peremptory amendment at 10 Ill. Reg. 1887, effective February 7, 1986; peremptory amendment at 10 Ill. Reg. 4963, effective March 11, 1986; peremptory amendment at 10 Ill. Reg. 10157, effective May 22, 1986; peremptory amendment at 10 Ill. Reg. 11160, effective June 10, 1986; peremptory amendment at 10 Ill. Reg. 12168, effective July 1, 1986; peremptory amendment at 10 Ill. Reg. 13762, effective July 31, 1986; peremptory amendment at 10 Ill. Reg. 16752, effective September 22, 1986; peremptory amendment at 10 Ill. Reg. 18051, effective

October 6, 1986; peremptory amendment at 11 ILL. Reg. 1709, effective January 2, 1987; peremptory amendment at 11 ILL. Reg. 8794, effective April 15, 1987; peremptory amendment at 11 ILL. Reg. 9977, effective May 6, 1987; peremptory amendment at 11 ILL. Reg. 10927, effective June 1, 1987; peremptory amendment at 11 ILL. Reg. 12050, effective July 2, 1987; peremptory amendment at 11 ILL. Reg. 14837, effective August 25, 1987.

SUBPART A: GENERAL PROVISIONS

Section 230.110 General Provisions

The Board incorporates by reference 40 CFR 60, Subpart A (1986); as amended at 52 Fed. Reg. 9778, March 26, 1987; as amended at 52 Fed. Reg. 17555, May 11, 1987.

(Source: Peremptory amendment at 11 ILL. Reg. 10927, effective June 1, 1987)

SUBPART D: STEAM GENERATORS

Section 230.140 Fossil-Fuel Fired Steam Generators for which Construction is Commenced after August 17, 1971

The Board incorporates by reference 40 CFR 60, Subpart D (1986), as amended at 51 Fed. Reg. 42796, November 25, 1986; as amended at 51 Fed. Reg. 42839, November 26, 1986.

(Source: Peremptory amendment at 11 ILL. Reg. 1709, effective January 2, 1987)

Section 230.141 Electric Utility Steam Generating Units for which Construction is Commenced after September 18, 1978

The Board incorporates by reference 40 CFR 60, Subpart Da (1986); as amended at 51 Fed. Reg. 42839, November 26, 1986.

(Source: Peremptory amendment at 11 ILL. Reg. 1709, effective January 2, 1987)

Section 230.142 Industrial-Commercial-Institutional Steam Generating Units for which Construction is Commenced after June 19, 1984

The Board incorporates by reference 40 CFR 60, Subpart Db as adopted at 51 Fed. Reg. 42768, November 25, 1986; as amended at 51 Fed. Reg. 42839, November 26, 1986.

(Source: Peremptory rule added at 11 ILL. Reg. 1709, effective January 2, 1987)

SUBPART E: INCINERATORS

Section 230.150 Incinerators

The Board incorporates by reference 40 CFR 60, Subpart E (1982).

SUBPART F: PORTLAND CEMENT PLANTS

Section 230.160 Portland Cement Plants

The Board incorporates by reference 40 CFR 60, Subpart F (1982).

SUBPART G: NITRIC ACID PLANTS

Section 230.170 Nitric Acid Plants

The Board incorporates by reference 40 CFR 60, Subpart G (1982), as amended at 48 Fed. Reg. 23608, May 25, 1983.

(Source: Peremptory amendment at 7 ILL. Reg. 8001, effective June 27, 1983)

SUBPART H: SULFURIC ACID PLANTS

Section 230.180 Sulfuric Acid Plants

The Board incorporates by reference 40 CFR 60, Subpart H (1982), as amended at 48 Fed. Reg. 23608, May 25, 1983; as amended at 48 Fed. Reg. 44700, September 29, 1983; as amended at 48 Fed. Reg. 48669, October 20, 1983.

(Source: Peremptory amendment at 7 ILL. Reg. 17021, effective December 8, 1983)

SUBPART I: ASPHALT CONCRETE PLANTS

Section 230.190 Asphalt Concrete Plants

The Board incorporates by reference 40 CFR 60, Subpart I (1982), as amended at 51 Fed. Reg. 12324, April 10, 1986.

(Source: Peremptory amendment at 10 ILL. Reg. 10157, effective May 22, 1986)

SUBPART J: PETROLEUM REFINERIES

Section 230.200 Petroleum Refineries

The Board incorporates by reference 40 CFR 60, Subpart J (1986), as amended at 51 Fed. Reg. 42839, November 26, 1986.

(Source: Peremptory amendment at 11 ILL. Reg. 1709, effective January 2, 1987)

**SUBPART K: STORAGE VESSELS FOR
PETROLEUM LIQUIDS**

**Section 230.210 Storage Vessels for Petroleum
Liquids Constructed after
June 11, 1973 and Prior to
May 19, 1978**

The Board incorporates by reference 40 CFR 60,
Subpart K (1982), as amended at 48 Fed. Reg.
3734, January 27, 1983.

(Source: Peremptory amendment at 7 III. Reg.
3029, effective March 7, 1983)

**Section 230.211 Storage Vessels for Petroleum
Liquids Constructed after May
18, 1978**

The Board incorporates by reference 40 CFR 60,
Subpart Ka (1982), as amended at 47 Fed. Reg.
54258, December 1, 1982; as amended at 48 Fed.
Reg. 3734, January 27, 1983.

(Source: Peremptory amendment at 7 III. Reg.
3029, effective March 7, 1983)

**Section 230.212 Volatile Organic Liquid
Storage Vessels (Including
Petroleum Liquid Storage
Vessels) for Which
Construction, Reconstruction,
or Modification Commenced
after July 23, 1984**

The Board incorporates by reference 40 CFR 60,
Subpart Kb, as adopted at 52 Fed. Reg. 11420,
April 8, 1987, as amended at 52 Fed. Reg. 22779,
June 16, 1987.

(Source: Peremptory amendment at 11 III. Reg.
12050, effective July 2, 1987)

SUBPART L: SECONDARY LEAD SMELTERS

Section 230.220 Secondary Lead Smelters

The Board incorporates by reference 40 CFR 60,
Subpart L (1982).

**SUBPART M: SECONDARY BRASS AND BRONZE
INGOT PRODUCTION PLANTS**

**Section 230.230 Secondary Brass and Bronze
Ingot Production Plants**

The Board incorporates by reference 40 CFR 60,
Subpart M (1984), as amended at 49 Fed. Reg.
43616, October 30, 1984.

(Source: Peremptory amendment at 8 III. Reg.
24320, effective November 29, 1984)

SUBPART N: IRON AND STEEL PLANTS

**Section 230.240 Primary Emissions from Basic
Oxygen Process Furnaces
Constructed after June 11,
1973**

The Board incorporates by reference 40 CFR 60,
Subpart N (1985), as amended at 51 Fed. Reg.
150, January 2, 1986.

(Source: Peremptory amendment at 10 III. Reg.
4963, effective March 11, 1986)

**Section 230.241 Secondary Emissions from
Basic Oxygen Process
Steelmaking Facilities
Constructed after January
20, 1983**

The Board incorporates by reference 40 CFR 60,
Subpart Na as adopted at 51 Fed. Reg. 150,
January 2, 1986.

(Source: Peremptory rule added at 10 III. Reg.
4963, effective March 11, 1986)

SUBPART O: SEWAGE TREATMENT PLANTS

Section 230.250 Sewage Treatment Plants

The Board incorporates by reference 40 CFR 60,
Subpart O (1982).

SUBPART P: PRIMARY COPPER SMELTERS

Section 230.260 Primary Copper Smelters

The Board incorporates by reference 40 CFR 60,
Subpart P (1982), as amended at 48 Fed. Reg.
23608, May 25, 1983.

(Source: Peremptory amendment at 7 III. Reg.
8001, effective June 21, 1983)

SUBPART Q: PRIMARY ZINC SMELTERS

Section 230.270 Primary Zinc Smelters

The Board incorporates by reference 40 CFR 60,
Subpart Q (1982), as amended at 48 Fed. Reg.
23608, May 25, 1983.

(Source: Peremptory amendment at 7 III. Reg.
8001, effective June 21, 1983)

SUBPART R: PRIMARY LEAD SMELTERS

Section 230.280 Primary Lead Smelters

The Board incorporates by reference 40 CFR 60, Subpart R (1982), as amended at 48 Fed. Reg. 23608, May 25, 1983.

(Source: Peremptory amendment at 7 Ill. Reg. 8001, effective June 21, 1983)

**SUBPART S: PRIMARY ALUMINUM
REDUCTION PLANTS**

**Section 230.290 Primary Aluminum Reduction
Plants**

The Board incorporates by reference 40 CFR 60, Subpart S (1982).

(Source: Peremptory amendment at 4 Ill. Reg. 359, effective August 25, 1980)

**SUBPART T: THE PHOSPHATE FERTILIZER
INDUSTRY: WET-PROCESS PHOSPHORIC
ACID PLANTS**

**Section 230.300 Phosphate Fertilizer
Industry: Wet-Process
Phosphoric Acid Plants**

The Board incorporates by reference 40 CFR 60, Subpart T (1982), as amended at 48 Fed. Reg. 3734, January 27, 1983; as amended at 48 Fed. Reg. 7128, February 17, 1983.

(Source: Peremptory amendment at 7 Ill. Reg. 3227, effective March 14, 1983)

**SUBPART U: THE PHOSPHATE FERTILIZER
INDUSTRY: SUPERPHOSPHORIC ACID PLANTS**

**Section 230.310 Phosphate Fertilizer
Industry: Superphosphoric
Acid Plants**

The Board incorporates by reference 40 CFR 60, Subpart U (1982), as amended at 48 Fed. Reg. 3734, January 27, 1983; as amended at 48 Fed. Reg. 7128, February 17, 1983.

(Source: Peremptory amendment at 7 Ill. Reg. 3227, effective March 14, 1983)

**SUBPART V: THE PHOSPHATE FERTILIZER
INDUSTRY: DIAMMONIUM PHOSPHATE PLANTS**

**Section 230.320 Phosphate Fertilizer
Industry: Diammonium
Phosphate Plants**

The Board incorporates by reference 40 CFR 60, Subpart V (1982), as amended at 48 Fed. Reg.

3734, January 27, 1983; as amended at 48 Fed. Reg. 7128, February 17, 1983.

(Source: Peremptory amendment at 7 Ill. Reg. 3227, effective March 14, 1983)

**SUBPART W: THE PHOSPHATE FERTILIZER
INDUSTRY: TRIPLE SUPERPHOSPHATE PLANTS**

**Section 230.330 Phosphate Fertilizer
Industry: Triple
Superphosphate Plants**

The Board incorporates by reference 40 CFR 60, Subpart W (1982), as amended at 48 Fed. Reg. 3734, January 27, 1983; as amended at 48 Fed. Reg. 7128, February 17, 1983.

(Source: Peremptory amendment at 7 Ill. Reg. 3227, effective March 14, 1983)

**SUBPART X: THE PHOSPHATE FERTILIZER
INDUSTRY: GRANULAR TRIPLE SUPERPHOSPHATE
STORAGE FACILITIES**

**Section 230.340 Phosphate Fertilizer
Industry: Granular Triple
Superphosphate Storage
Facilities**

The Board incorporates by reference 40 CFR 60, Subpart X (1982), as amended at 48 Fed. Reg. 3734, January 27, 1983.

(Source: Peremptory amendment at 7 Ill. Reg. 3029, effective March 7, 1983)

SUBPART Y: COAL PREPARATION PLANTS

Section 230.350 Coal Preparation Plants

The Board incorporates by reference 40 CFR 60, Subpart Y (1982), as amended at 48 Fed. Reg. 3734, January 27, 1983.

(Source: Peremptory amendment at 7 Ill. Reg. 3029, effective March 7, 1983)

SUBPART Z: FERROALLOY PRODUCTION FACILITIES

**Section 230.360 Ferroalloy Production
Facilities**

The Board incorporates by reference 40 CFR 60, Subpart Z (1982), as amended at 48 Fed. Reg. 3734, January 27, 1983.

(Source: Peremptory amendment at 7 Ill. Reg. 3029, effective March 7, 1983)

**SUBPART AA: STEEL PLANTS: ELECTRIC
ARC FURNACES**

**Section 230.370 Steel Plants: Electric Arc
Furnaces**

The Board incorporates by reference 40 CFR 60, Subpart AA (1984), as amended at 49 Fed. Reg. 43838, October 31, 1984.

(Source: Peremptory amendment at 8 ILL. Reg. 24320, effective November 29, 1984)

**SUBPART AAa: STEEL PLANTS: ELECTRIC
ARC FURNACES AND ARGON-OXYGEN DECARBURIZATION
VESSELS CONSTRUCTED AFTER AUGUST 17, 1983**

**Section 230.371 Steel Plants: Electric Arc
Furnaces and Argon-Oxygen
Decarburization Vessels
Constructed After August 17,
1983**

The Board incorporates by reference 40 CFR 60, Subpart AAa as adopted at 49 Fed. Reg. 43838, October 31, 1984.

(Source: Peremptory rule adopted at 8 ILL. Reg. 24320, effective November 29, 1984)

SUBPART BB: KRAFT PULP MILLS

Section 230.380 Kraft Pulp Mills

The Board incorporates by reference 40 CFR 60, Subpart BB (1984), as amended at 50 Fed. Reg. 6316, February 14, 1985; as amended at 50 Fed. Reg. 9577, March 8, 1985; as amended at 51 Fed. Reg. 18538, May 20, 1986.

(Source: Peremptory amendment at 10 ILL. Reg. 11160, effective June 10, 1986)

SUBPART CC: GLASS MANUFACTURING PLANTS

Section 230.390 Glass Manufacturing Plants

The Board incorporates by reference 40 CFR 60, Subpart CC (1984), as amended at 49 Fed. Reg. 41030, October 19, 1984.

(Source: Peremptory amendment at 8 ILL. Reg. 24320, effective November 29, 1984)

SUBPART DD: GRAIN ELEVATORS

Section 230.400 Grain Elevators

The Board incorporates by reference 40 CFR 60, Subpart DD (1982).

**SUBPART EE: SURFACE COATING OF
METAL FURNITURE**

**Section 230.410 Surface Coating of Metal
Furniture**

The Board incorporates by reference 40 CFR 60, Subpart EE (1984), as amended at 50 Fed. Reg. 18247, April 30, 1985.

(Source: Peremptory amendment at 9 ILL. Reg. 10289, effective June 24, 1985)

SUBPART GG: STATIONARY GAS TURBINES

Section 230.430 Stationary Gas Turbines

The Board incorporates by reference 40 CFR 60, Subpart GG (1983), as amended at 49 Fed. Reg. 30672, July 31, 1984.

(Source: Peremptory amendment at 8 ILL. Reg. 24320, effective November 29, 1984)

SUBPART HH: LIME MANUFACTURING PLANTS

Section 230.440 Lime Manufacturing Plants

The Board incorporates by reference 40 CFR 60, Subpart HH (1986), as amended at 52 Fed. Reg. 4773, February 17, 1987.

(Source: Peremptory amendment at 11 ILL. Reg. 8794, effective April 15, 1987)

**SUBPART KK: LEAD-ACID BATTERY
MANUFACTURING PLANTS**

**Section 230.470 Lead-Acid Battery
Manufacturing Plants**

The Board incorporates by reference 40 CFR 60, Subpart KK (1982).

(Source: Peremptory rule adopted at 6 ILL. Reg. 6072, effective May 7, 1982)

**SUBPART LL: METALLIC MINERAL
PROCESSING PLANTS**

**Section 230.480 Metallic Mineral Processing
Plants**

The Board incorporates by reference 40 CFR 60, Subpart LL, as adopted at 49 Fed. Reg. 6458, February 21, 1984.

(Source: Peremptory rule added at 8 ILL. Reg. 3042, effective February 27, 1984)

**SUBPART MI: AUTOMOBILE AND LIGHT-DUTY
TRUCK SURFACE COATING OPERATIONS**

**Section 230.490 Automobile and Light-Duty
Truck Surface Coating
Operations**

The Board incorporates by reference 40 CFR 60,
Subpart MI (1982).

(Source: Peremptory rule adopted at 5 III. Reg.
1983, effective February 17, 1981)

SUBPART MN: PHOSPHATE ROCK PLANTS

Section 230.500 Phosphate Rock Plants

The Board incorporates by reference 40 CFR 60,
Subpart MN (1982).

(Source: Peremptory rule adopted at 6 III. Reg.
6072, effective May 7, 1982)

SUBPART PP: AMMONIUM SULFATE MANUFACTURE

Section 230.520 Ammonium Sulfate Manufacture

The Board incorporates by reference 40 CFR 60,
Subpart PP (1982).

(Source: Peremptory rule adopted at 5 III. Reg.
1983, effective February 17, 1981)

**SUBPART QQ: GRAPHIC ARTS INDUSTRY:
PUBLICATION ROTOGRAVURE PRINTING**

**Section 230.530 Graphic Arts Industry:
Publication Rotogravure
Printing**

The Board incorporates by reference 40 CFR 60,
Subpart QQ (1982), as amended at 47 Fed. Reg.
50644, November 8, 1982; as amended at 48 Fed.
Reg. 1056, January 10, 1983.

(Source: Peremptory amendment at 7 III. Reg.
3029, effective March 7, 1983)

**SUBPART RR: PRESSURE SENSITIVE TAPE AND
LABEL SURFACE COATING OPERATIONS**

**Section 230.540 Pressure Sensitive Tape and
Label Surface Coating
Operations**

The Board incorporates by reference 40 CFR 60,
Subpart RR, as adopted at 48 Fed. Reg. 48368,
October 18, 1983.

(Source: Peremptory rule added at 7 III. Reg.
17021, effective December 8, 1983)

**SUBPART SS: INDUSTRIAL SURFACE COATING:
LARGE APPLIANCES**

**Section 230.550 Industrial Surface Coating:
Large Appliances**

The Board incorporates by reference 40 CFR 60,
Subpart SS (1982), as amended at 47 Fed. Reg.
47778, October 27, 1982.

(Source: Peremptory rule adopted at 6 III. Reg.
15041, effective November 29, 1982)

**SUBPART TT: METAL COIL SURFACE
COATING OPERATIONS**

**Section 230.560 Metal Coil Surface Coating
Operations**

The Board incorporates by reference 40 CFR 60,
Subpart TT (1985), as amended in R86-26 at 51
Fed. Reg. 22938, June 24, 1986.

(Source: Peremptory rule adopted at 10 III.
Reg. 13762, effective July 31, 1986)

**SUBPART UU: ASPHALT PROCESSING AND
ASPHALT ROOFING MANUFACTURE**

**Section 230.570 Asphalt Processing and
Asphalt Roofing Manufacture**

The Board incorporates by reference 40 CFR 60,
Subpart UU (1982), as amended at 47 Fed. Reg.
34137, August 6, 1982.

(Source: Peremptory rule adopted at 6 III. Reg.
14572, effective November 5, 1982)

**SUBPART VV: EQUIPMENT LEAKS OF VOC IN THE
SYNTHETIC ORGANIC CHEMICALS
MANUFACTURING INDUSTRY**

**Section 230.580 Equipment Leaks of VOC in the
Synthetic Organic Chemicals
Manufacturing Industry**

The Board incorporates by reference 40 CFR 60,
Subpart VV (1983), as amended at 48 Fed. Reg.
48328, October 18, 1983; as amended at 49 Fed.
Reg. 22590, May 30, 1984; as amended at 49 Fed.
Reg. 26738, June 29, 1984.

(Source: Peremptory amendment at 8 III. Reg.
14665, effective August 1, 1984)

**SUBPART LW: BEVERAGE CAN SURFACE
COATING INDUSTRY**

**Section 230.590 Beverage Can Surface Coating
Industry**

The Board incorporates by reference 40 CFR 60, Subpart LW, as adopted at 48 Fed. Reg. 38728, August 25, 1983.

(Source: Peremptory rule adopted at 7 Ill. Reg. 13700, effective September 29, 1983)

SUBPART XX: BULK GASOLINE TERMINALS

Section 230.600 Bulk Gasoline Terminals

The Board incorporates by reference 40 CFR 60, Subpart XX, as adopted at 48 Fed. Reg. 35790, August 18, 1983.

(Source: Peremptory amendment at 7 Ill. Reg. 11735, effective September 13, 1983)

**SUBPART FFF: FLEXIBLE VINYL AND URETHANE
COATING AND PRINTING**

**Section 230.680 Flexible Vinyl and Urethane
Coating and Printing**

The Board incorporates by reference 40 CFR 60, Subpart FFF as adopted at 49 Fed. Reg. 26884, June 29, 1984; as amended at 49 Fed. Reg. 32848, August 17, 1984.

(Source: Peremptory amendment at 8 Ill. Reg. 24320, effective November 29, 1984)

**SUBPART GGG: EQUIPMENT LEAKS OF VOC IN
PETROLEUM REFINERIES**

**Section 230.690 Equipment Leaks of VOC in
Petroleum Refineries**

The Board incorporates by reference 40 CFR 60, Subpart GGG as adopted at 49 Fed. Reg. 22598, May 30, 1984.

(Source: Peremptory rule adopted at 8 Ill. Reg. 18075, effective June 20, 1984)

**SUBPART HHM: SYNTHETIC FIBER
PRODUCTION FACILITIES**

**Section 230.700 Synthetic Fiber Production
Facilities**

The Board incorporates by reference 40 CFR 60, Subpart HHM (1983), as amended at 49 Fed. Reg. 13646, April 5, 1984; as amended at 49 Fed. Reg. 18096, April 27, 1984.

(Source: Peremptory amendment at 8 Ill. Reg. 7927, effective May 22, 1984)

**SUBPART KKK: EQUIPMENT LEAKS OF VOC FROM
ONSHORE NATURAL GAS PROCESSING PLANTS**

**Section 230.730 Equipment Leaks of VOC from
Onshore Natural Gas
Processing Plants**

The Board incorporates by reference 40 CFR 60, Subpart KKK, as adopted at 50 Fed. Reg. 26122, June 24, 1985.

(Source: Peremptory rule adopted at 9 Ill. Reg. 13377, effective August 20, 1985)

**SUBPART LLL: ONSHORE NATURAL GAS PROCESSING:
SO₂ EMISSIONS**

**Section 230.740 Onshore Natural Gas
Processing: SO₂ Emissions**

The Board incorporates by reference 40 CFR 60, Subpart LLL, as adopted at 50 Fed. Reg. 40158, October 1, 1985.

(Source: Peremptory rule adopted at 9 Ill. Reg. 17037, effective October 18, 1985)

**SUBPART OOO: NONMETALLIC MINERAL
PROCESSING PLANTS**

**Section 230.770 Nonmetallic Mineral
Processing Plants**

The Board incorporates by reference 40 CFR 60, Subpart OOO, as adopted at 50 Fed. Reg. 31328, August 1, 1985.

(Source: Peremptory rule adopted at 9 Ill. Reg. 13377, effective August 20, 1985)

**SUBPART PPP: WOOL FIBERGLASS INSULATION
MANUFACTURING PLANTS**

**Section 230.780 Wool Fiberglass Insulation
Manufacturing Plants**

The Board incorporates by reference 40 CFR 60, Subpart PPP, as adopted at 50 Fed. Reg. 7694, February 25, 1985.

(Source: Peremptory rule adopted at 9 Ill. Reg. 8884, effective May 28, 1985)

**Table A
Rule into Section Table**

Rule	Section
901.....	230.110
902.....	230.140
902.T.....	230.141
903.....	230.150
904.....	230.160
905.....	230.170
906.....	230.180

Rule	Section
907.....	230.190
908.....	230.200
909.....	230.210
909.1.....	230.211
910.....	230.220
911.....	230.230
912.....	230.240
913.....	230.250
914.....	230.260
915.....	230.270
916.....	230.280
917.....	230.290
918.....	230.300
919.....	230.310
920.....	230.320
921.....	230.330
922.....	230.340
923.....	230.350
924.....	230.360
925.....	230.370
-----	230.371
926.....	230.380
927.....	230.390
928.....	230.400
929.....	230.410
931.....	230.430
932.....	230.440
935.....	230.470
937.....	230.490
938.....	230.500
940.....	230.520
941.....	230.530
943.....	230.550
944.....	230.560
945.....	230.570
947.....	230.590
948.....	230.600
951.....	Appendix A
952.....	Appendix B
953.....	Appendix C
968.....	230.700
-----	230.680
-----	230.690
-----	230.730
-----	230.740
-----	230.770
-----	230.780

Table B
Section into Rule Table

Section	Rule
230.110.....	901
230.140.....	902
230.141.....	902.1
230.150.....	903
230.160.....	904
230.170.....	905
230.180.....	906
230.190.....	907
230.200.....	908
230.210.....	909
230.211.....	909.1
230.220.....	910
230.230.....	911
230.240.....	912
230.250.....	913
230.260.....	914
230.270.....	915

Section	Rule
230.280.....	916
230.290.....	917
230.300.....	918
230.310.....	919
230.320.....	920
230.330.....	921
230.340.....	922
230.350.....	923
230.360.....	924
230.370.....	925
230.371.....	-----
230.380.....	926
230.390.....	927
230.400.....	928
230.410.....	929
230.430.....	931
230.440.....	932
230.470.....	935
230.480.....	-----
230.490.....	937
230.500.....	938
230.520.....	940
230.530.....	941
230.550.....	943
230.560.....	944
230.570.....	945
230.590.....	947
230.600.....	948
230.680.....	-----
230.690.....	-----
230.700.....	968
230.730.....	-----
230.740.....	-----
230.770.....	-----
230.780.....	-----
Table A.....	Added in Codification
Table B.....	Added in Codification
Appendix A.....	951
Appendix B.....	952
Appendix C.....	953

Appendix A Reference Methods

The Board incorporates by reference 40 CFR 60, Appendix A (1986), as amended at 51 Fed. Reg. 29104, August 14, 1986; as amended at 51 Fed. Reg. 32454, September 12, 1986; as amended at 51 Fed. Reg. 42839, November 26, 1986; as amended at 51 Fed. Reg. 44803, December 12, 1986; as amended at 52 Fed. Reg. 9778, March 26, 1987; as amended at 52 Fed. Reg. 10852, April 3, 1987; as amended at 52 Fed. Reg. 19797 (numbered as 18797), May 27, 1987; as amended at 52 Fed. Reg. 20191, June 1, 1987; as amended in R87-15, July 16, 1987; as amended at 52 Fed. Reg. 22888, June 16, 1987.

(Source: Peremptory amendment at 11-111, Reg. 14837, effective August 25, 1987)

**Appendix B
Performance Specifications**

The Board incorporates by reference 40 CFR 60, Appendix B (1986), as amended at 52 Fed. Reg. 17555, May 11, 1987.

(Source: Peremptory amendment at 11 Ill. Reg. 10927, effective June 1, 1987)

**Appendix C
Determination of Emission Rate Change**

The Board incorporates by reference 40 CFR 60, Appendix C (1982).

**Appendix F
Quality Assurance Procedures**

The Board incorporates by reference 40 CFR 60, Appendix F (1986).

(Source: Peremptory rule added at 11 Ill. Reg. 11557, effective June 18, 1987)

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

CHAPTER I: POLLUTION CONTROL BOARD

SUBCHAPTER e: PEREMPTORY RULES

**PART 231
HAZARDOUS AIR POLLUTANTS**

SUBPART A: GENERAL PROVISIONS

Section
231.110 General Provisions

SUBPART B: ASBESTOS

Section
231.120 Emission Standard for Asbestos
(Renumbered)

**SUBPART B: RADON-222 EMISSIONS FROM
UNDERGROUND URANIUM MINES**

Section
231.122 Radon-222 Emissions from Underground
Uranium Mines

SUBPART C: BERYLLIUM

Section
231.130 Emission Standard for Beryllium

SUBPART D: BERYLLIUM ROCKET MOTOR FIRING

Section
231.140 Emission Standard for Beryllium
Rocket Motor Firing

SUBPART E: MERCURY

Section
231.150 Emission Standard for Mercury

SUBPART F: VINYL CHLORIDE

Section
231.160 Emission Standard for Vinyl Chloride

**SUBPART H: RADIONUCLIDE EMISSIONS FROM
DEPARTMENT OF ENERGY (DOE) FACILITIES**

Section
231.180 Radionuclide Emissions from
Department of Energy (DOE) Facilities

**SUBPART I: RADIONUCLIDE EMISSIONS FROM
FACILITIES LICENSED BY THE NUCLEAR REGULATORY
COMMISSION (NRC) AND FEDERAL FACILITIES NOT
COVERED BY 35 ILL. ADM. CODE 231.180**

Section
231.190 Radionuclide Emissions from
Facilities Licensed by the Nuclear
Regulatory Commission (NRC) and
Federal Facilities Not Covered by 35
Ill. Adm. Code 231.180

**SUBPART J: EQUIPMENT LEAKS (FUGITIVE EMISSION
SOURCES) OF BENZENE**

Section
231.200 Equipment Leaks (Fugitive Emission
Sources) of Benzene

**SUBPART K: RADIONUCLIDE EMISSIONS FROM
ELEMENTAL PHOSPHORUS PLANTS**

Section
231.210 Radionuclide Emissions from Elemental
Phosphorus Plants

SUBPART M: ASBESTOS

Section
231.230 Emission Standard for Asbestos

**SUBPART N: INORGANIC ARSENIC EMISSIONS
FROM GLASS MANUFACTURING PLANTS**

Section
231.240 Inorganic Arsenic Emissions from
Glass Manufacturing Plants

**SUBPART O: INORGANIC ARSENIC EMISSIONS
FROM PRIMARY COPPER SMELTERS**

Section
231.250 Inorganic Arsenic Emissions from
Primary Copper Smelters

**SUBPART P: INORGANIC ARSENIC EMISSIONS
FROM ARSENIC TRIOXIDE AND METALLIC
ARSENIC PRODUCTION FACILITIES**

Section
231.260 Inorganic Arsenic Emissions from
Arsenic Trioxide and Metallic Arsenic
Production Facilities

**SUBPART V: EQUIPMENT LEAKS (FUGITIVE
EMISSION SOURCES)**

Section
231.320 Equipment Leaks (Fugitive Emission
Sources)

**SUBPART W: RADON-222 EMISSIONS FROM
LICENSED URANIUM MILL TAILINGS**

Section
231.330 Radon-222 Emissions from Licensed
Uranium Mill Tailings

Table A Rule into Section Table; Section into
Rule Table

Appendix A: National Emission Standards for
Hazardous Air Pollutants, Compliance Status
Information

Appendix B: Test Methods

Appendix C: Quality Assurance Procedures

AUTHORITY: Implementing and authorized by
Section 9.1(c) of the Environmental Protection
Act (Ill. Rev. Stat. 1981, ch. 111 1/2, par.
1009.1(c)).

SOURCE: Peremptory rule adopted at 4 ILL. Reg. 9, p. 255, effective February 20, 1980; peremptory amendment at 6 ILL. Reg. 9437, effective July 15, 1982; peremptory amendment at 6 ILL. Reg. 14572, effective November 5, 1982; peremptory amendment at 7 ILL. Reg. 3029, effective March 7, 1983; codified at 7 ILL. Reg. 13624; peremptory amendment at 8 ILL. Reg. 1815, effective January 24, 1984; peremptory amendment at 8 ILL. Reg. 14660, effective August 1, 1984; peremptory amendment at 8 ILL. Reg. 24315, effective November 29, 1984; peremptory amendment at 9 ILL. Reg. 8878, effective May 28, 1985; peremptory amendment at 9 ILL. Reg. 9249, effective June 4, 1985; peremptory amendment at 9 ILL. Reg. 20924, effective December 16, 1985; peremptory amendment at 10 ILL. Reg. 9820, effective May 20, 1986; peremptory amendment at 10 ILL. Reg. 10152, effective May 21, 1986; peremptory amendment at 10 ILL. Reg. 15315, effective September 9, 1986; peremptory amendment in R86-43, R86-45, R86-47 at 10 ILL. Reg. 19578, effective Oct. 30, 1986; peremptory amendment at 11 ILL. Reg. 10922, effective June 1, 1987; peremptory amendment at 11 ILL. Reg. 11551, effective June 18, 1987; peremptory amendment at 11 ILL. Reg. 14848, effective August 25, 1987.

SUBPART A: GENERAL PROVISIONS

Section 231.110 General Provisions

The Board incorporates by reference 40 CFR 61, Subpart A (1986), as amended at 51 Fed. Reg. 34904, September 30, 1986.

(Source: Peremptory amendment at 10 ILL. Reg. 19578, effective October 30, 1986)

SUBPART B: ASBESTOS

Section 231.120 Emission Standard for Asbestos (Renumbered)

(Source: Section 231.120 renumbered to Section 231.230 and amended at 8 ILL. Reg. 14660, effective August 1, 1984)

SUBPART B: RADON-222 EMISSIONS FROM UNDERGROUND URANIUM MINES

Section 231.122 Radon-222 Emissions from Underground Uranium Mines

The Board incorporates by reference 40 CFR 61, Subpart B, as adopted at 50 Fed. Reg. 15386, April 17, 1985.

(Source: Peremptory rule adopted at 9 ILL. Reg. 9249, effective June 4, 1985)

SUBPART C: BERYLLIUM

Section 231.130 Emission Standard for Beryllium

The Board incorporates by reference 40 CFR 61, Subpart C (1982).

SUBPART D: BERYLLIUM ROCKET MOTOR FIRING

Section 231.140 Emission Standard for Beryllium Rocket Motor Firing

The Board incorporates by reference 40 CFR 61, Subpart D (1987).

SUBPART E: MERCURY

Section 231.150 Emission Standard for Mercury

The Board incorporates by reference 40 CFR 61, Subpart E (1986), as amended at 52 Fed. Reg. 8724, March 19, 1987.

(Source: Peremptory amendment at 11 ILL. Reg. 10922, effective June 1, 1987)

SUBPART F: VINYL CHLORIDE

Section 231.160 Emission Standard for Vinyl Chloride

The Board incorporates by reference 40 CFR 61, Subpart F (1986), as amended at 51 Fed. Reg. 34904, September 30, 1986.

(Source: Peremptory amendment at 10 ILL. Reg. 19578, effective October 30, 1986)

SUBPART H: RADIONUCLIDE EMISSIONS FROM DEPARTMENT OF ENERGY (DOE) FACILITIES

Section 231.180 Radionuclide Emissions from Department of Energy (DOE) Facilities

The Board incorporates by reference 40 CFR 61, Subpart H (1984), as adopted at 50 Fed. Reg. 5190, February 6, 1985.

(Source: Peremptory rule adopted at 9 ILL. Reg. 8878, effective May 28, 1985)

**SUBPART I: RADIONUCLIDE EMISSIONS
FROM FACILITIES
LICENSED BY THE NUCLEAR REGULATORY COMMISSION
(NRC) AND FEDERAL FACILITIES NOT COVERED BY
35 ILL. ADM. CODE 231.180**

**Section 231.190 Radionuclide Emissions from
Facilities Licensed by the
Nuclear Regulatory Commission
(NRC) and Federal Facilities
Not Covered by 35 Ill. Adm.
Code 231.180**

The Board incorporates by reference 40 CFR 61,
Subpart I (1984), as adopted at 50 Fed. Reg.
5190, February 6, 1985.

(Source: Peremptory rule adopted at 9 Ill. Reg.
8878, effective May 28, 1985)

**SUBPART J: EQUIPMENT LEAKS (FUGITIVE EMISSION
SOURCES) OF BENZENE**

**Section 231.200 Equipment Leaks (Fugitive
Emission Sources) of Benzene**

The Board incorporates by reference 40 CFR 61,
Subpart J (1984), as adopted at 49 Fed. Reg.
23498, June 6, 1984.

(Source: Peremptory rule adopted at 8 Ill. Reg.
14660, effective August 1, 1984)

**SUBPART K: RADIONUCLIDE EMISSIONS FROM
ELEMENTAL PHOSPHORUS PLANTS**

**Section 231.210 Radionuclide Emissions from
Elemental Phosphorus Plants**

The Board incorporates by reference 40 CFR 61,
Subpart K (1986), as amended at 52 Fed. Reg.
28140, July 28, 1987.

(Source: Peremptory rule adopted at 11 Ill.
Reg. 14848, effective August 25, 1987)

SUBPART M: ASBESTOS

Section 231.230 Emission Standard for Asbestos

The Board incorporates by reference 40 CFR 61,
Subpart M (1985), as amended at 51 Fed. Reg.
8199, March 10, 1986.

(Source: Peremptory amendment at 10 Ill. Reg.
9820, effective May 20, 1986)

**SUBPART N: INORGANIC ARSENIC EMISSIONS
FROM GLASS MANUFACTURING PLANTS**

**Section 231.240 Inorganic Arsenic Emissions
from Glass Manufacturing
Plants**

The Board incorporates by reference 40 CFR 61,
Subpart N (1985) as adopted at 51 Fed. Reg.

27956, August 4, 1986; as amended at 51 Fed.
Reg. 35354, October 3, 1986.

(Source: Peremptory rule added at 10 Ill. Reg.
19578, effective October 30, 1986)

**SUBPART O: INORGANIC ARSENIC EMISSIONS
FROM PRIMARY COPPER SMELTERS**

**Section 231.250 Inorganic Arsenic Emissions
from Primary Copper Smelters**

The Board incorporates by reference 40 CFR 61,
Subpart O (1985) as adopted at 51 Fed. Reg.
27956, August 4, 1986; as amended at 51 Fed.
Reg. 35354, October 3, 1986.

(Source: Peremptory rule added at 10 Ill. Reg.
19578, effective October 30, 1986)

**SUBPART P: INORGANIC ARSENIC EMISSIONS
FROM ARSENIC TRIOXIDE AND METALLIC
ARSENIC PRODUCTION FACILITIES**

**Section 231.260 Inorganic Arsenic Emissions
from Arsenic Trioxide and
Metallic Arsenic Production
Facilities**

The Board incorporates by reference 40 CFR 61,
Subpart P as adopted at 51 Fed. Reg. 27956,
August 4, 1986; as amended at 51 Fed. Reg.
35354, October 30, 1986.

(Source: Peremptory rule added at 10 Ill. Reg.
19578, effective October 30, 1986)

**SUBPART V: EQUIPMENT LEAKS (FUGITIVE
EMISSION SOURCES)**

**Section 231.320 Equipment Leaks (Fugitive
Emission Sources)**

The Board incorporates by reference 40 CFR 61,
Subpart V (1986), as amended at 51 Fed. Reg.
34904, September 30, 1986.

(Source: Peremptory amendment at 10 Ill. Reg.
19578, effective October 30, 1986)

**SUBPART W: RADON-222 EMISSIONS FROM
LICENSED URANIUM MILL TAILINGS**

**Section 231.330 Radon-222 Emissions from
Licensed Uranium Mill Tailings**

The Board incorporates by reference 40 CFR 61,
Subpart W as adopted at 51 Fed. Reg. 34056,
September 24, 1986.

(Source: Peremptory rule added at 10 Ill. Reg.
19578, effective Oct. 30, 1986)

Table A
Rule into Section Table;
Section into Rule Table

Rule	Section
1001.....	231.110
1002.....	231.120
	(Renumbered)
	231.122
1003.....	231.130
1004.....	231.140
1005.....	231.150
1006.....	231.160
Added in Codification.....	Table A
1051.....	Appendix A
1052.....	Appendix B
1053.....	Appendix C
-----	231.180
-----	231.190
-----	231.200
-----	231.210
-----	231.230
-----	231.320

Appendix A
National Emission Standards for Hazardous Air
Pollutants, Compliance Status Information

The Board incorporates by reference 40 CFR 61, Appendix A (1982).

Appendix B
Test Methods

The Board incorporates by reference 40 CFR 61, Appendix B (1986), as amended at 51 Fed. Reg. 27956, August 4, 1986; as amended at 51 Fed. Reg. 35354, October 3, 1986; as amended at 52 Fed. Reg. 20197, June 1, 1987.

(Source: Peremptory amendment at 10 Ill. Reg. 11551, effective June 18, 1987)

Appendix C
Quality Assurance Procedures

The Board incorporates by reference 40 CFR 61, Appendix C (1982), as amended at 47 Fed. Reg. 39168, September 7, 1982.

(Source: Peremptory amendment at 6 Ill. Reg. 14572, effective November 5, 1982)

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

CHAPTER 1: POLLUTION CONTROL BOARD

SUBCHAPTER 1: OPEN BURNING

**PART 237
OPEN BURNING**

SUBPART A: GENERAL PROVISIONS

Section 237.101	Definitions
237.102	Prohibitions
237.103	Explosive Waste
237.110	Local Enforcement
237.120	Exemptions
237.130	Freeport Air Curtain Destructor

SUBPART B: PERMITS

Section 237.201	Available Permits
237.202	Permit Application
237.203	Permit Conditions
237.204	Standards of Issuance
237.205	Duration and Renewal
237.206	Revision
237.207	Revocation

Appendix A: Rule into Section Table
Appendix B: Section into Rule Table

AUTHORITY: Implementing Section 10 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1010 and 1027).

SOURCE: Adopted as Rules 401 through 406, R70-11, 2 PCB 373, filed and effective September 7, 1971; Renumbered as Chapter 2: Air Pollution, Part V: Open Burning, R72-11, 6 PCB 199, filed and effective November 10, 1972; amended at 3 Ill. Reg. 51, p. 117, effective December 7, 1979; amended at 6 Ill. Reg. 14521, effective November 8, 1982; codified at 7 Ill. Reg. 13626.

SUBPART A: GENERAL PROVISIONS

Section 237.101 Definitions

All terms which appear in this Part have the definitions specified in this Part and 35 Ill. Adm. Code 201 and 211.

"Agricultural Wastes": any refuse, except garbage and dead animals, generated on a farm or ranch by crop and livestock production practices including such items as bags, cartons, dry bedding, structural materials and crop residues but excluding landscape wastes.

"Clean Wood Building Debris": the wooden remains of a building. The term excludes rubber, asphalt and nonwooden materials.

"Disaster": a major disaster declared by the President of the United States or the Governor of Illinois.

"Disaster Area": area in which a major disaster has been declared by the President of the United States or the Governor of Illinois.

"Domicile Waste": any refuse generated on single-family domiciliary property as a result of domiciliary activities. The term excludes landscape waste, garbage and trade waste.

"Garbage": refuse resulting from the handling, processing, preparation, cooking and consumption of food or food products.

"Landscape Waste": any vegetable or plant refuse, except garbage and agricultural waste. The term includes trees, tree trimmings, branches, stumps, brush, weeds, leaves, grass, shrubbery and yard trimmings.

"Open Burning": the combustion of any matter in such a way that the products of the combustion are emitted to the open air without originating in or passing through equipment for which a permit could be issued under Section 9(b) of the Act (Environmental Protection Act, Ill. Rev. Stat. 1981, ch. 111 1/2, par. 1009(b)).

"Refuse": any discarded matter, or any matter which is to be reduced in volume, or otherwise changed in chemical or physical properties, in order to facilitate its discard, removal or disposal.

"Restricted Areas": the area within the boundaries of any "municipality" as defined in the Illinois Municipal Code (Ill. Rev. Stat. 1981, ch. 24, par. 1-1-2), plus a zone extending one mile beyond the boundaries of any such municipality having a population of 1,000 or more according to the latest federal census.

"Trade Waste": any refuse resulting from the prosecution of any trade, business, industry, commercial venture, utility or service activity, and any government or institutional activity, whether or not for profit. The term includes landscape waste but excludes agricultural waste.

(Source: Amended at 3 Ill. Reg. 51, p. 117, effective December 7, 1979)

Section 237.102 Prohibitions

- No person shall cause or allow open burning, except as provided in this Part.
- No person shall cause or allow the burning of any refuse in any chamber or apparatus, unless such chamber or apparatus is designed for the purpose of disposing of the class of refuse being burned.

Section 237.103 Explosive Waste

Open burning of wastes creating a hazard of explosion, fire or other serious harm, unless

authorized by other provisions in this Part, shall be permitted only upon application for and grant of a variance as provided by the Environmental Protection Act (Act) (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1001 et seq.) and by the Pollution Control Board's (Board) Procedural Rules (35 Ill. Adm. Code: Subtitle A, Chapter 1).

Section 237.110 Local Enforcement

It shall be the obligation of local governments as well as of the Environmental Protection Agency (Agency), to enforce by appropriate means the prohibitions of this Part.

Section 237.120 Exemptions

The following activities are not in violation of Section 9(c) of the Act (Ill. Rev. Stat. 1981, ch. 111 1/2, par. 1009(c)) or of this Part unless they cause air pollution as defined in the Act. Nothing in this Section shall exempt such activities from applicable local restrictions.

- a) The open burning of agricultural waste, but only:
 - 1) On the premises on which such waste is generated; and
 - 2) In areas other than restricted areas; and
 - 3) When atmospheric conditions will readily dissipate contaminants; and
 - 4) If such burning does not create a visibility hazard on roadways, railroad tracks or air fields; and
 - 5) More than 105 meters (1,000 feet) from residential or other populated areas; and
 - 6) When it can be affirmatively demonstrated that no economically reasonable alternative method of disposal is available.

- b) The open burning of domicile waste, but only:

- 1) On the premises on which such waste is generated; and
- 2) In areas other than restricted areas; and
- 3) When atmospheric conditions will readily dissipate contaminants; and
- 4) If such burning does not create a visibility hazard on roadways, railroad tracks or air fields.

- c) The open burning of landscape waste, but only:

- 1) On the premises on which such waste is generated; and
- 2) When atmospheric conditions will readily dissipate contaminants; and

- 3) If such burning does not create a visibility hazard on roadways, railroad tracks or air fields; and
- 4) In those areas of the State which are not in the following prohibited areas:

- A) Municipalities having a population in excess of 2,500 according to the latest federal census.
- B) Municipalities of any size which adjoin a municipality having a population in excess of 2,500.
- C) All municipalities wholly within 40 air miles (64.5 kilometers) of Meigs Field, Chicago, Illinois.
- D) All municipalities wholly within 20 air miles (32.3 kilometers) of McKinley Bridge connecting St. Louis, Missouri and Venice, Illinois.
- E) Rural areas 105 meters (1,000 feet) or less from a municipality in which open burning of landscape waste is prohibited.

- d) The setting of fires to combat or limit existing fires, when reasonably necessary in the judgment of the responsible government official.
- e) The burning of fuels for legitimate campfire, recreational and cooking purposes, or in domestic fireplaces, in areas where such burning is consistent with other laws, provided that no garbage shall be burned in such cases.
- f) The burning of waste gases, provided that in the case of refineries all such flares shall be equipped with smokeless tips or comparable devices to reduce pollution.
- g) Small open flames for heating tar, for welding, acetylene torches, highway safety flares and the like.

Section 237.130 Freeport Air Curtain Destructor

This Section applies to an air curtain destructor operated by the City of Freeport within Section 7, Township 26 North, Range 8 East of the Fourth Principal Meridian, Stephenson County.

- a) Burning of landscape waste and clean wood waste in this air curtain destructor pursuant to permit conditions is lawful.
- b) The Agency may grant a permit for this air curtain destructor pursuant to 35 Ill. Adm. Code 201 and Subpart B of this Part.
- c) The existing permit and operating requirements of 35 Ill. Adm. Code 710 and 737 (Parts II and III of Chapter 7) shall not apply to this air curtain destructor;

provided, however, that this subsection shall be inoperative in the event the Board, after the effective date of this Section, pursuant to Section 22 of the Act (Ill. Rev. Stat. 1981, ch. 111 1/2, par. 1022), adopts regulations applicable to this air curtain destructor.

- d) If the City of Freeport allows public access to the air curtain destructor site, the Agency shall, as a condition of any permit used for an air curtain destructor, limit access between the landfill and air curtain destructor areas, sufficient to assure compliance with the Act and Board regulations applicable to the landfill.

(Source: Added at 6 Ill. Reg. 14521, effective November 8, 1982)

SUBPART B: PERMITS

Section 237.201 Available Permits

The Agency may grant permits for open burning in the following instances:

- a) For instruction in methods of fire fighting; or for testing of equipment for extinguishing fires, of flares, and signals, or of experimental incinerators, or for research in control of fires;
- b) For the destruction of vegetation on site under circumstances in which its removal would necessitate significant environmental damage;
- c) For research or management in prairie or forest ecology;
- d) For the burning of landscape waste in any area of the State if such burning is conducted with the aid of an air curtain destructor or comparable device to reduce emissions substantially; and does not occur within 305 meters (1,000 feet) of any residential or other populated area;
- e) For the destruction of oil sludges in petroleum production for safety reasons where alternative means including product recovery are impracticable; provided, that when emergency conditions require, such burning may be done without a permit, and a report shall be filed with the Agency within ten days, thereafter, indicating the place and time of such burning, the quantities burned, the meteorological conditions, and the reasons why emergency burning was necessary;
- f) In a disaster area, for the open burning of clean wooden building debris, landscape waste and agricultural waste caused by a disaster.

Section 237.202 Permit Application

An application for a permit shall be in such form and shall contain such information as shall

be required in procedures adopted by the Agency. Such application shall contain, as a minimum, data and information sufficient to inform the Agency with respect to: the exact quantities and types of material to be burned; the exact nature and exact quantities of air contaminant emissions which will result; the exact frequency, including date where appropriate, when such burning will take place, the exact location of the burning site including a map showing distances to residences, populated areas, roadways, air fields, etc.; the methods or actions which will be taken to reduce the emission of air contaminants; the reasons why alternatives to open burning are not available; and the reasons why such burning is necessary to the public interest.

Section 237.203 Permit Conditions

The Agency may impose such conditions in the permit as may be necessary to accomplish the purposes of the Act or this Part.

Section 237.204 Standards of Issuance

No permit shall be granted unless the applicant proves to the satisfaction of the Agency that the open burning: is necessary to the public interest; will be conducted in such a time, place and manner as to minimize the emission of air contaminants; will have no serious detrimental effect upon adjacent properties or the occupants thereof. Provided that applications for permits to open burn pursuant to Section 237.201(f) shall contain, as a minimum, data and information sufficient to inform the Agency with respect to: the nature and estimated quantities of the materials to be burned, the manner in which the material to be burned resulted from the disaster, the location of the material to be burned, the date when such burning will take place, and the reasons why alternatives to open burning are not available.

Section 237.205 Duration and Renewal

No permit shall be valid for longer than one year. Applications for renewal of a permit shall be submitted to the Agency at least 90 days prior to the expiration of the prior permit, and shall conform to Section 237.202. The standards for issuance of renewal permits shall be as set forth in Section 237.204.

Section 237.206 Revision

The Agency may revise any permit granted pursuant to this rule, or any conditions contained in any such permit.

Section 237.207 Revocation

Violation of any of the conditions of the permit shall be grounds for revocation of the permit by the Agency, as well as for other sanctions provided in the Act.

**Appendix A
Rule into Section Table**

Rule	Section
501.....	237.101
502.....	237.102
503.....	237.120
504(a).....	237.201
504(b).....	237.202
504(c).....	237.204
504(d).....	237.203
504(e).....	237.205
504(f).....	237.207
504(g).....	237.206
505.....	237.103
506.....	237.110
550.....	237.130

**Appendix B
Section into Rule Table**

Section	Rule
237.101.....	501
237.102.....	502
237.103.....	505
237.110.....	506
237.120.....	503
237.130.....	550
237.201.....	504(a)
237.202.....	504(b)
237.203.....	504(d)
237.204.....	504(c)
237.205.....	504(e)
237.206.....	504(g)
237.207.....	504(f)
Appendix A.....	Added in Codification
Appendix B.....	Added in Codification

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE 8: AIR POLLUTION

CHAPTER 1: POLLUTION CONTROL BOARD

**SUBCHAPTER 1: EMISSION STANDARDS AND
LIMITATIONS FOR MOBILE SOURCES**

**PART 240
MOBILE SOURCES**

SUBPART A: DEFINITIONS AND GENERAL PROVISIONS

Section	
240.101	Preamble
240.102	Definitions
240.103	Prohibitions
240.104	Inspection
240.105	Penalties
240.106	Determination of Violation

SUBPART B: EMISSIONS

Section	
240.121	Smoke Emissions
240.122	Diesel Engine Emissions
240.123	Liquid Petroleum Gas Fuel Systems
240.124	Vehicle Exhaust Emission Standards
240.125	Compliance Determination

Appendix A: Rule into Section Table
Appendix B: Section into Rule Table

AUTHORITY: Implementing Sections 9, 10 and 13 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1009, 1010, 1013 and 1027).

SOURCE: Adopted as Chapter 2: Air Pollution, Part VII: Mobile Sources, filed and effective April 14, 1972; codified at 7 Ill. Reg. 13628; amended in R85-25 at 10 Ill. Reg. 11277, effective June 16, 1986.

**SUBPART A: DEFINITIONS AND
GENERAL PROVISIONS**

Section 240.101 Preamble

As the state of knowledge and technology relating to the control of emissions from motor vehicles shall permit and make appropriate, and in furtherance of the purposes of the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1001 et seq.) (Act), Pollution Control Board (Board) shall provide for by rules and regulations the control of emissions from motor vehicles. Such rules and regulations shall prescribe requirements for the installation and use of equipment designed to reduce or eliminate emissions and for the proper maintenance of such equipment and of vehicles. Any rules and regulations pursuant to this Section shall be consistent with provisions of federal law, if any, relating to control of emissions from the vehicles concerned.

Section 240.102 Definitions

All terms which appear in this Part have the definitions specified in this Part and 35 Ill. Adm. Code 201 and 211.

"Diesel Engine": all types of internal-combustion engines in which air is compressed to a temperature sufficiently high to ignite fuel injected directly into the cylinder area.

"Diesel Locomotive": a diesel engined vehicle designed to move cars on a railway.

"Fleet": five or more vehicles.

"Heavy Duty Vehicle": a motor vehicle rated at more than 8000 pounds gross vehicle weight.

"High Idle": that portion of a two-speed idle test conducted with the engine operating at a speed of approximately 2500 RPM.

"Idle Mode": that portion of a vehicle emission test procedure conducted with the engine disconnected from an external load and operating at minimum throttle.

"Light Duty Truck": a motor vehicle rated at 8000 pounds gross vehicle weight or less, which is designed for carrying more than 10 persons or designed for the transportation of property, freight or cargo, or is a derivative of such a vehicle.

"Light Duty Vehicle": a passenger car designed to carry not more than 10 persons.

"Model Year": the year of manufacture of a motor vehicle based upon the annual production period as designated by the manufacturer and indicated on the title and registration of the vehicle. If the manufacturer does not designate a production period for the vehicle, then "model year" means the calendar year of manufacture.

"Motor Vehicle": as used in this section "motor vehicle" shall have the same meaning as in the Illinois Vehicle Code (Ill. Rev. Stat. 1981, ch. 95 1/2, par. 1-146).

"Opacity": a condition which renders material partially or wholly impervious to the transmittance of light, and causes the obstruction of an observer's view.

"Persons Liable": all persons owning, operating or in charge of control of any equipment who shall cause or permit or participate in any violation of these rules and regulations either as owner, operator, lessee or lessor.

"Two-Speed Idle Test": a vehicle emission test procedure consisting of the measurements of exhaust emission in high idle and idle modes.

(Source: Amended at 10 Ill. Reg. 11277, effective June 16, 1986)

Section 240.103 Prohibitions

Except as permitted or authorized by law, no person shall fail to maintain in good working order or remove, dismantle, or otherwise cause to be inoperative any equipment or feature constituting an operational element of the air pollution control systems or mechanisms of a motor vehicle as required by rules or regulations of the Board and the United States Environmental Protection Agency to be maintained in or on the vehicle.

Section 240.104 Inspection

All motor vehicles subject to inspection pursuant to Section 13A-104 of the Illinois Vehicle Emissions Inspection Law (Ill. Rev. Stat. 1985, Ch. 95 1/2, par. 13A-104) shall comply with the exhaust emission standards for carbon monoxide and hydrocarbons set forth at Section 240.124 of this Part.

(Source: Amended at 10 Ill. Reg. 11277, effective June 16, 1986)

Section 240.105 Penalties

a) Any violations of Sections 240.103, 240.121, 240.122, and 240.123 shall be subject to the penalties as set forth in Section 42 of the Act (Ill. Rev. Stat. 1985, Ch. 111 1/2, par. 1042).

b) Any violations of Sections 240.104 and 240.124 shall be subject to the penalties as set forth in Sections 13A-112 and 13A-113 of the Vehicle Emissions Inspection Law (Ill. Rev. Stat. 1985, Ch. 95 1/2, par. 13A-112, 13A-113).

(Source: Amended at 10 Ill. Reg. 11277, effective June 16, 1986)

Section 240.106 Determination of Violation

a) Any violations of Sections 240.103, 240.121, 240.122, and 240.123 of this Part shall be determined by visual observation; or by a test procedure employing an opacity measurement system as qualified by 35 Ill. Adm. Code 201, Subpart J.

b) Any violations of Section 240.124 shall be determined in accordance with test procedures adopted by the Agency.

(Source: Amended at 10 Ill. Reg. 11277, effective June 16, 1986)

SUBPART B: EMISSIONS

Section 240.121 Smoke Emissions

a) There shall be no visible emissions of smoke from a motor vehicle, zero opacity.

b) Motor vehicles traveling Illinois public highways from out of State must comply with subsection (a).

c) No used motor vehicle shall be sold or transferred in Illinois unless that said vehicle meets subsection (a).

Section 240.122 Diesel Engine Emission Standards

a) The visible emission standard in Section 240.121 shall not apply to diesel engines.

b) With the exception of subsection (e), diesel engines manufactured before January 1, 1970, shall not be operated in such a manner as to emit smoke which is equal to or greater than 30% opacity except for individual smoke puffs. Individual puffs of smoke shall not exceed 15 seconds in duration.

c)

1) Diesel engines shall be operated only on the specific fuels as specified in the engine manufacturers' specifications for that specific engine, or on fuels exceeding engine manufacturers' specifications.

2) Persons liable for operating diesel engines; fleets wholly within standard metropolitan statistical areas shall furnish to the Environmental Protection Agency, once each year, proof that the fuel purchased and used in their operations conforms to subsection (c)(1).

d) All diesel engines operated on public highways in Illinois coming from out of the State shall conform to subsection (b).

e)

1) No person shall cause or allow the emission of smoke from any diesel locomotive in the State of Illinois to exceed thirty percent (30%) opacity.

2) Subsection (e)(1) shall not apply to:

A) Smoke resulting from starting a cold locomotive: for a period of time not to exceed 10 minutes.

B) Smoke emitted while accelerating under load from a throttle setting other than idle to a higher throttle setting: for a period of time not to exceed 40 seconds.

C) Smoke emitted upon locomotive loading following idle: for a period of time not to exceed 2 minutes.

D) Smoke emitted during locomotive testing, maintenance, adjustment, rebuilding, repairing or breaking in: for a period of time not to

exceed 3 consecutive minutes and an aggregate of 10 minutes in any 60 minute period.

- E) Smoke emitted by a locomotive which because of its age or design makes replacement or retrofit parts necessary to achieve smoke reduction unavailable. These locomotives shall be retired at the earliest possible time.

Section 240.123 Liquid Petroleum Gas Fuel Systems

- a) Motor vehicles which are solely fueled with liquid petroleum gas shall have excess air injection systems made inoperative, where such systems are installed by the vehicle manufacturers.

b)

- 1) Motor vehicles which operate on liquid petroleum gas or gasoline fuels alternately, in dual fuel systems, shall have excess air injection systems inoperative when operating on liquid petroleum gas where excess air injection systems are installed by the vehicle manufacturers.

- 2) Motor vehicles which operate on liquid petroleum gas or gasoline fuels alternately in a dual fuel system, shall have excess air injection systems operational when operating on gasoline, where excess air injection systems are installed by the vehicle manufacturers.

- 3) Motor vehicles which operate on liquid petroleum gas or gasoline fuels alternately in a dual fuel system, shall have the intake manifold heat riser system to the carburetor operational at all times when the motor vehicles are operating.

Section 240.124 Vehicle Exhaust Emission Standards

- a) Exhaust emissions from light duty vehicles shall not exceed the following limitations:

Model Year	Carbon Monoxide (%)	Hydrocarbons as Hexane (ppm)
1968 - 1971	9.0	900
1972 - 1974	8.0	800
1975 - 1977	7.0	700
1978 - 1979	6.0	600
1980	3.0	300
1981 and later	1.2	220

- b) Exhaust emissions from light duty trucks shall not exceed the following limitations:

Model Year	Carbon Monoxide (%)	Hydrocarbons as Hexane (ppm)
1968 - 1971	9.0	900
1972 - 1974	8.0	800

1975 - 1978	7.0	700
1979 - 1980	6.0	600
1981 - 1983	3.0	300
1984 and later	1.2	220

- c) Exhaust emissions from Heavy duty vehicles shall not exceed the following limitations:

Model Year	Carbon Monoxide (%)	Hydrocarbons as Hexane (ppm)
1968 - 1971	9.5	1500
1972 - 1978	9.0	900
1979 - 1984	7.0	700
1985 and later	3.0	300

(Source: Added at 10 Ill. Reg. 11277, effective June 16, 1986)

Section 240.125 Compliance Determination

For purposes of determining compliance with Section 240.124 of this Part, all vehicles shall be inspected while operating in the idle mode, and all 1981 and later model year light duty vehicles and light duty trucks shall be inspected at high idle during a two-speed idle test.

(Source: Added at 10 Ill. Reg. 11277, effective June 16, 1986)

Appendix A Rule into Section Table

Rule	Section
701.....	240.101
702.....	240.102
703.....	240.103
704.....	240.104
705.....	240.105
706.....	240.121
707.....	240.122
708.....	240.123
709.....	240.106

Appendix B Section into Rule Table

Section	Rule
240.101.....	701
240.102.....	702
240.103.....	703
240.104.....	704
240.105.....	705
240.106.....	709
240.121.....	706
240.122.....	707
240.123.....	708
Appendix A.....	Added in Codification
Appendix B.....	Added in Codification

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

CHAPTER I: POLLUTION CONTROL BOARD

**SUBCHAPTER I: AIR QUALITY STANDARDS
AND EPISODES**

PART 243

AIR QUALITY STANDARDS

SUBPART A: GENERAL PROVISIONS

Section	
243.101	Definitions
243.102	Preamble
243.103	Applicability
243.104	Nondegradation
243.106	Monitoring
243.107	Reference Conditions
243.108	Incorporations by Reference

SUBPART B: STANDARDS AND MEASUREMENT METHODS

Section	
243.121	Particulates
243.122	Sulfur Oxides (Sulfur Dioxide)
243.123	Carbon Monoxide
243.124	Nitrogen Dioxide
243.125	Ozone
243.126	Lead

Appendix A: Rule into Section Table

Appendix B: Section into Rule Table

Appendix C: Past Compliance Dates

AUTHORITY: Implementing Section 10 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1010 and 1027).

SOURCE: Adopted as Chapter 2: Air Pollution, Part III: Air Quality Standards, in R71-23, 4 PCB 191, filed and effective April 14, 1972; amended in R80-11, 46 PCB 125, at 6 Ill. Reg. 5004, effective April 22, 1982; amended in R82-12, at 7 Ill. Reg. 9906, effective August 18, 1983; codified at 7 Ill. Reg. 13630.

SUBPART A: GENERAL PROVISIONS

Section 243.101 Definitions

a) Except as hereinafter stated and unless a different meaning of a term is clear from its context, the definitions of terms used in this Part shall be the same as those used in the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1001 et seq.) (Act).

b) All terms which appear in this Part have the definitions specified by 35 Ill. Adm. Code 201 and 211.

Section 243.102 Preamble

a) Air quality standards are limits on atmospheric concentrations of air

contaminants established for the purpose of protecting public health and welfare. The levels of air quality designated by the standards are designed to protect against injury to human, plant, or animal life and they are further intended to allow maximum enjoyment of life and property consistent with the intent of the Act.

b) The first use of our air resources is to sustain life. Air entering the respiratory tract must not menace health. Therefore, the air quality standards set must, as a minimum, provide air which will not adversely affect, through acute or chronic symptoms, the health of the community. Adverse health effects include not only the possible production and aggravation of disease, but also interference with bodily functions. The standards have also taken into account soiling, corrosion, vegetation damage, and other human effects.

c) Primary ambient air quality standards define levels of air quality which are necessary, with an adequate margin of safety, to protect the public health. Secondary ambient air quality standards define levels of air quality which are necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

d) The standards are more than goals. They are legally enforceable limitations, and any person causing or contributing to a violation of the standards is subject to enforcement proceedings under the Act. The standards have also been designed for use as a basis for the development of implementation plans by State and local agencies for the abatement and control of pollutant emissions from existing sources, and for the determination of air contaminant emission limitations to insure that population and economic growth trends do not add to the region's air pollution problems.

Section 243.103 Applicability

The standards in this Part are applicable throughout the State of Illinois, except as otherwise provided in this Part.

Section 243.104 Nondegradation

Existing ambient air quality which is better than the established ambient air quality standards at the date of their adoption will be maintained in its present high quality. Such ambient air quality shall not be lowered unless and until it is proved to the Illinois Environmental Protection Agency (Agency) that such change is justifiable as a result of necessary economic and social development and will not interfere with or become injurious to human health or welfare.

Section 243.106 Monitoring

Pollution levels will be determined by fixed or mobile sampling stations beyond the premises on

which a source is located. Stations will be located according to the guidelines for establishing monitoring networks as developed by the United States Environmental Protection Agency.

Section 243.107 Reference Conditions

All measurements of air quality are corrected to a reference temperature of 25 °C, and to a reference pressure of 760 millimeters of mercury (1013.2 millibars).

Section 243.108 Incorporations by Reference

The following materials are incorporated by reference:

- a) High volume sampler method, 40 CFR 50, Appendix B (1982), 36 Fed. Reg. 22388, November 25, 1971.
- b) Pararosaniline method, 40 CFR 50, Appendix A (1982).
- c) Non-dispersive infrared spectrometry technique, 40 CFR 50, Appendix C (1982), 36 Fed. Reg. 22391, November 25, 1971.
- d) Colorimetric method, 36 Fed. Reg. 22396, November 25, 1971.
- e) Ozone-ethylene reaction method, 40 CFR 50, Appendix D (1982), 36 Fed. Reg. 22392, November 25, 1971.
- f) Lead, 40 CFR 50, Appendix G (1982), 43 Fed. Reg. 46258, October 5, 1978, as amended at 44 Fed. Reg. 37915, June 29, 1979; 46 Fed. Reg. 44163, September 3, 1981.

(Source: Added and codified at 7 Ill. Reg. 13630)

SUBPART B: STANDARDS AND MEASUREMENT METHODS

Section 243.121 Particulates

- a) Primary Standards. The primary ambient air quality standards for particulate matter are:
 - 1) An annual geometric mean concentration of 75 micrograms per cubic meter; and,
 - 2) A maximum 24-hour concentration not to be exceeded more than once per year of 260 micrograms per cubic meter.
- b) Secondary Standards. The secondary ambient air quality standards for particulate matter are:
 - 1) An annual geometric mean concentration of 60 micrograms per cubic meter; and,
 - 2) A maximum 24-hour concentration not to be exceeded more than once per year of 150 micrograms per cubic meter.

c) Measurement Method. For determining conformance with particulate air quality standards, particulate matter shall be measured by the high volume sampler method as described in 40 CFR 50, Appendix B (1982), 36 Fed. Reg. 22388, November 25, 1971, or by an equivalent method approved by the Agency.

Section 243.122 Sulfur Oxides (Sulfur Dioxide)

a) Primary Standards. The primary ambient air quality standards for sulfur oxides measured as sulfur dioxide are:

- 1) An annual arithmetic mean concentration of 80 micrograms per cubic meter (0.03 ppm); and,
- 2) A maximum 24-hour concentration not to be exceeded more than once per year of 365 micrograms per cubic meter (0.14 ppm).

b) Secondary Standard. The secondary ambient air quality standard for sulfur oxides measured as sulfur dioxide is a maximum 3-hour concentration not to be exceeded more than once per year of 1,300 micrograms per cubic meter (0.5 ppm).

c) Measurement Method. For determining conformance with sulfur oxide air quality standards, sulfur oxides shall be measured as sulfur dioxide by the pararosaniline method described in 40 CFR 50, Appendix A (1982), or by an equivalent method of proof approved by the Agency.

Section 243.123 Carbon Monoxide

a) Standards. The ambient air quality standards for carbon monoxide are:

- 1) A maximum 8-hour concentration not to be exceeded more than once per year of 10 milligrams per cubic meter (9 ppm); and,
- 2) A maximum 1-hour concentration not to be exceeded more than once per year of 40 milligrams per cubic meter (35 ppm).

b) Measurement Method. For determining conformance with the carbon monoxide air quality standard, carbon monoxide shall be measured by the non-dispersive infrared spectrometry technique as described in 40 CFR 50, Appendix C (1982), 36 Fed. Reg. 22391, November 25, 1971, or by an equivalent method approved by the Agency.

Section 243.124 Nitrogen Dioxide

a) Standard. The ambient air quality standard for nitrogen dioxide is an annual arithmetic mean concentration of 100 micrograms per cubic meter (0.05 ppm).

b) Measurement Method. For determining conformance with the nitrogen dioxide air quality standard, nitrogen dioxide shall be

measured by the colorimetric method as described in 36 Fed. Reg. 22196, November 25, 1971, or by an equivalent method approved by the Agency.

Section 243.125 Ozone

- a) Standard. The ambient air quality standard for ozone is 0.12 ppm (235 micrograms per cubic meter) maximum 1-hour concentration not to be exceeded on more than one day per year.
- b) Measurement Method. For determining conformance with the ozone air quality standard, ozone shall be measured by the ozone-ethylene reaction method as described in 40 CFR 50, Appendix D (1982), as amended.

(Source: Amended at 6 Ill. Reg. 5804, effective April 22, 1982)

Section 243.126 Lead

- a) Standard. The ambient air quality standards for lead and its compounds are 1.5 micrograms per cubic meter, maximum arithmetic mean average over a calendar quarter.
- b) Measurement Method. For determining conformance with the ambient air quality standards for lead and its compounds, lead and its compounds shall be measured by the atomic absorption spectrometry or equivalent method as described in 40 CFR 50, Appendix G (1982).

(Source: Amended at 7 Ill. Reg. 9906, effective August 8, 1983)

Appendix A Rule into Section Table

Rule	Section
Unnumbered.....	243.101
301.....	243.102
302.....	243.103
303.....	243.104
304.....	Appendix C
305.....	243.106
306.....	243.107
307.....	243.121
308.....	243.122
309.....	Repealed
310.....	243.123
311.....	243.124
312.....	243.125
313.....	243.126

Appendix B Section into Rule Table

Section	Rule
243.101.....	Unnumbered
243.102.....	301
243.103.....	302
243.104.....	303
243.106.....	305

Section	Rule
243.107.....	306
243.108.....	Added in Codification
243.121.....	307
243.122.....	308
243.123.....	310
243.124.....	311
243.125.....	312
243.126.....	313
Appendix A.....	Added in Codification
Appendix B.....	Added in Codification
Appendix C.....	304

Appendix C Past Compliance Dates

Rule 304

Except as otherwise noted, compliance with this Part was required on June 26, 1973.

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE 8: AIR POLLUTION

CHAPTER 1: POLLUTION CONTROL BOARD

**SUBCHAPTER 1: AIR QUALITY STANDARDS
AND EPISODES**

**PART 244
EPISODES**

**SUBPART A: DEFINITIONS AND
GENERAL PROVISIONS**

Section	
244.101	Definitions
244.102	Responsibility of the Agency
244.103	Determination of Required Actions
244.104	Determination of Atmospheric Conditions
244.105	Determination of Expected Contaminant Emissions
244.106	Monitoring
244.107	Determination of Areas Affected
244.108	Failure to Comply with Episode Requirements
244.109	Sealing of Offenders

SUBPART B: LOCAL AGENCY RESPONSIBILITIES

Section	
244.121	Local Agency Responsibilities

SUBPART C: EPISODE ACTION PLANS

Section	
244.141	Requirement for Plans
244.142	Facilities for which Action Plans are Required
244.143	Submission of Plans
244.144	Contents of Plans
244.145	Processing Procedures

SUBPART D: EPISODE STAGES

Section	
244.161	Watch, Alert and Emergency Levels
244.162	Criteria for Declaring an Advisory or Watch
244.163	Criteria for Declaring a Yellow Alert
244.164	Criteria for Declaring a Red Alert
244.165	Criteria for Declaring an Emergency
244.166	Criteria for Terminating Watch, Alert and Emergency
244.167	Episode Stage Notification
244.168	Contents of Episode Stage Notification
244.169	Actions During Episode Stages

Appendix A:	Rule into Section Table
Appendix B:	Section into Rule Table
Appendix C:	Past Compliance Dates
Appendix D:	Required Emission Reduction Actions

AUTHORITY: Implementing Section 10 and
authorized by Section 27 of the Environmental
Protection Act (III, Rev. Stat. 1981, ch. III
1/2, pars. 1010 and 1027).

SOURCE: Adopted as Rules 102 through 114, in
R70-7, 1 PCB 101, filed and effective December
8, 1970; renumbered as Chapter 2: Air

Pollution, Part IV: Episodes, in R72-6, 5 PCB
183, filed and effective August 18, 1972;
amended in R80-11, 45 PCB 577, at 6 III, Reg.
5804, effective April 22, 1982; codified at 7
III, Reg. 13612.

**SUBPART A: DEFINITIONS AND
GENERAL PROVISIONS**

Section 244.101. Definitions

All terms which appear in this Part have the
definitions specified by this Part and 15 III,
Adm. Code 201 and 211.

"Air Stagnation Advisory": a special bulletin
issued by the National Weather Service entitled
"Air Stagnation Advisory," which is used to warn
air pollution control agencies that stagnant
atmospheric conditions are expected which could
cause increased concentrations of air
contaminants near the ground.

"btu": British thermal unit.

"COH": Coefficient of Haze (per 1,000 linear
feet). Particulate matter as measured by the
automatic paper tape sampler method and reported
as COH's. When particulate matter is recorded
on a weight per unit volume basis, the
conversion 1 COH equals 125 micrograms per cubic
meter shall be employed.

"Episode": the period of time at a location in
which an air pollution watch, yellow alert, red
alert or emergency has been declared.

"Fleet Vehicle": any one of three or more
vehicles operated for the transportation of
persons or property in the furtherance of any
commercial or industrial enterprise, for-hire or
not-for-hire.

"Indirect Source": any building, facility,
plant, auditorium or other structure or
combination thereof, or any street, road, or
highway or airport, which causes or contributes
to air pollution through the attraction of
mobile air pollution emission sources.

"Level": the magnitude of pollution (expressed
as average concentration, COH or product) during
a specified time period.

"Low Sulfur Fuel": any fuel containing 1.0% or
less sulfur by weight.

"Parking Lots": parking lots shall include all
lots, areas, buildings or facilities or portions
of lots, areas, buildings or facilities whose
primary purpose is for the temporary parking of
motor vehicles.

"Product": the arithmetic product of the
average sulfur dioxide concentration in parts
per million (ppm) during a specified time period
and the average particulate concentration in
COH's during that same specified time period.

Section 244.102 Responsibility of the Agency

The Director of the Illinois Environmental Protection Agency (Director) or his designated representative has sole authority for the declaration of episode stages under these rules. The Illinois Environmental Protection Agency (Agency) has primary responsibility for the conduct of air pollution episode operations including but not limited to air contaminant monitoring, source surveillance and enforcement activities during air pollution episodes which affect any portion of the State of Illinois. The Agency shall notify any local agency assigned a significant episode control role in the Illinois Air Pollution Implementation Plan prior to the initiation, alteration or termination of any episode stage or control strategy in the jurisdictional area of any such local agency.

Section 244.103 Determination of Required Actions

To the maximum degree practicable, emission control actions taken pursuant to these rules shall be consistent with the extent of any air pollution alert or emergency.

- a) When the existence of any episode stage is caused by one or more specific emission sources, the Agency shall require emission control action steps applicable only to such source or sources to be taken.
- b) When the existence of any episode stage is caused by one or more specific air contaminants, action shall be taken to reduce the concentration of such contaminant or contaminants.
- c) When motor vehicle emission control actions are required, the Agency shall promptly declare the applicable episode stage and phase actions so as to allow reasonable notice and preparation for effective vehicle control actions.

Section 244.104 Determination of Atmospheric Conditions

When determining expected atmospheric conditions, the Agency shall consider all available meteorological information, including but not limited to official National Weather Service observations, analyses, forecasts and advisories, as well as meteorological data and reports from other sources. Atmospheric conditions shall include but not be limited to stagnation areas, weather fronts, pressure systems, inversions, precipitation and wind patterns and variations in solar insolation, temperature and atmospheric stability.

Section 244.105 Determination of Expected Contaminant Emissions

When determining expected contaminant emissions, the Agency shall consider all available emission information including but not limited to

emission inventories for stationary sources, pertinent emissions summaries, motor vehicle traffic patterns, and known or estimated seasonal, daily or hourly variations in emission rates or traffic patterns.

Section 244.106 Monitoring

- a) Monitoring stations used to determine advisory, watch, alert or emergency levels shall be located according to Federal guidelines for establishment of air quality surveillance networks and shall use measurement methods or equivalent methods as officially authorized by the United States Environmental Protection Agency (USEPA).
- b) Whenever any monitoring station registers air contaminant concentrations in excess of watch or alert levels, proper operation of the sampling equipment at such stations shall be verified by the Agency or local agency cooperating with the Agency before the concentrations are used to declare any advisory, watch, alert or emergency stage.

Section 244.107 Determination of Areas Affected

- a) An advisory or watch shall be declared for the entire Illinois portion of any Air Quality Control Region if any part of such region meets the advisory or watch criteria. When atmospheric conditions and contaminant emissions in a region are such as to cause the advisory or watch criteria to be met in another region, an advisory or watch shall be declared for both regions.
- b) An alert or emergency shall be declared for only those portions of an advisory or watch area which meet the applicable criteria of Subpart D or cause such criteria to be met elsewhere. When such criteria have been met, sectors of the advisory or watch area requiring alert or emergency actions shall be defined depending upon expected atmospheric conditions, contaminant emissions and dispersion analyses. Alerts or emergencies shall then be declared for one or more of these sectors.

Section 244.108 Failure to Comply with Episode Requirements

Failure to comply with an approved episode action plan, required actions listed in Appendix D or the reasonable orders of the Director or his designated representative during any alert or emergency shall expose any person to the penalty provisions of the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1001 et seq.) (Act). In all cases, the reasonable orders of the Director or his designated representative shall take precedence over episode action plans or required actions listed in Appendix D provided, however, that such orders shall not exceed that which is authorized by this Part or by the Act.

Section 244.109 Sealing of Offenders

To the extent allowed by the Act, the Agency may seal any facility, vehicle, vessel, aircraft or equipment operated in violation of this Part during any alert or emergency or otherwise contributing to an immediate danger to health.

SUBPART B: LOCAL AGENCY RESPONSIBILITIES

Section 244.121 Local Agency Responsibilities

Local air pollution control agencies shall cooperate with the Agency in monitoring, surveillance and enforcement activities to the extent of their capabilities during any air pollution episode. This cooperation shall meet the following specific conditions:

- a) **Operation of Monitoring Equipment.** At any time other than during an episode, local agencies with real-time monitoring equipment shall operate all such monitoring equipment at a minimum level necessary to determine whether any level of air contaminants specified in this Part has been reached.
- b) **Reporting Levels to Agency.** Such local agencies shall report to the Agency Emergency Action Center within thirty (30) minutes by either telephone or telemetry when any advisory, watch, alert or emergency level specified in this Part has been reached as indicated on their air monitoring equipment.
- c) **Operation of Telemetry Equipment.** Local agencies with air contaminant sampling networks connected by telemetry with the headquarters of the Agency shall conduct their operations in such a manner as to provide valid data to the Agency.
- d) **Agency Representatives at Local Agency Control Centers.** In regions where local agencies are participating with the Agency in episode control activities, one or more Agency representatives may station themselves at the control center of the local agency during an air pollution episode. The Agency representatives shall have authority to cause data to be transmitted by telephone or other rapid form of communication to Agency headquarters and after consultation with said local agency to require the initiation, alteration or termination of control strategy by persons required to take action under this Part as directed by the Director.
- e) **Local Agency Episode Operations Plan.** Local agencies participating with the Agency in episode control activities shall file for approval with the Agency an episode operations plan which describes procedures for obtaining and processing episode action plans, monitoring air contaminant levels during routine and episode operations, alerting the public, governmental officials, emission sources and other interested parties of episode stages, and performing surveillance and enforcement activities during episodes.

SUBPART C: EPISODE ACTION PLANS

Section 244.141 Requirement for Plans

All persons responsible for the operation of a facility of a type set forth in Section 244.142 shall have on file with the Agency written episode action plans (plans), consistent with safe operating procedures, for reducing the levels of air contaminants during yellow alerts, red alerts and emergencies. These plans shall be designed to reduce air contaminants in accordance with the provisions of these rules and shall be on forms designed by the Agency. Further guidelines interpreting these requirements may be developed by the Agency and shall be filed with the Secretary of State pursuant to the Administrative Procedure Act (Ill. Rev. Stat. 1981, ch. 127, pars. 1001 et seq.).

Section 244.142 Facilities for which Action Plans are Required

- a) Electric power generating stations burning fossil fuels.
- b) Facilities having fuel combustion emission sources with a total rated heat input in excess of 2.9 MW (10 mmBtu/hr) burning coal or fuel oil, other than those sources exempted from permit requirements by 35 Ill. Adm. Code 201.146(c).
- c) Facilities emitting more than 91 Mg/yr or 249 kg per operating day (100 tons per year or 550 pounds per operating day) of sulfur dioxide, carbon monoxide, nitrogen oxides, particulate matter, organic material or of any other air contaminant designated by the Agency as harmful to human health.
- d) Governmental or commercial installations established primarily for the burning of refuse.
- e) Parking lots located in major metropolitan areas having spaces for more than 200 vehicles; except for those lots predominantly serving residences, medical facilities, rail, bus and air transportation terminals, grocery stores and pharmacies, lots provided by employers primarily for their employees and comparable lots as designated by the Agency.
- f) Fleet vehicle operations of 50 or more vehicles in a major metropolitan area except those used for delivery of grocery, pharmaceutical and medical products.
- g) Local, State and Federal government agencies employing more than 100 employees in a major metropolitan area.
- h) State, county and municipal offices which have responsibility for road repair in a major metropolitan area.
- i) Other governmental, industrial or commercial establishments or activities classified by

the Agency as significant direct or indirect sources of air contaminant emissions.

Section 244.143 Submission of Plans

- a) Plans required by this rule shall be submitted to:
 - 1) The Agency for facilities in Illinois located outside of Cook County.
 - 2) The Cook County Department of Environmental Control for facilities located in Cook County and outside of the City of Chicago.
 - 3) The Chicago Department of Environmental Control for facilities located within the City of Chicago.
- b) At any time after the effective date of this Part the Agency may request plans from all persons required to submit plans or a local agency specified above may request plans from persons required to submit plans to such local agency. In such cases, plans shall be submitted to the requesting agency within 30 days after receipt of written notification that such plans must be submitted.
- c) If any person required to submit a plan or revise a plan fails to submit a plan or revise a plan satisfactory to the Agency, the Agency may file a formal complaint with the Pollution Control Board (Board) pursuant to applicable portions of the Act.
- d) Facilities having operational changes invalidating plans shall within 30 days of such changes submit a new plan for Agency approval.

Section 244.144 Contents of Plans

- a) Plans shall list all significant sources of air contaminants within the facility; shall describe the manner in which contaminant emissions will be reduced during yellow alert, red alert and emergency; and shall specify the approximate magnitude of the reduction of emissions that will be achieved.
- b) Plans for all electric power generating stations and for all facilities located in the Chicago, Peoria or St. Louis (Illinois) major metropolitan areas having fuel combustion emission sources required to take action during yellow alert to reduce sulfur dioxide emissions shall specify either the means whereby a supply of low sulfur fuel adequate for at least four days operation will be assured, or an emissions reduction plan to lower sulfur dioxide emissions to those which would be discharged if a switch to such fuel were effected.
- c) Plans for parking lots shall list the major facilities serviced by the lot, the total

parking capacity and the estimated average number of vehicles utilizing the lot each day. Plans shall describe the manner in which an orderly curtailment of parking will be effected on the first day and closure on the second calendar day of the applicable alert, including a method by which unauthorized use of the lot will be prevented. If the lot services grocer/stores, pharmacies, medical offices or clinics, or other essential facilities as designated by the Agency, procedures for allowing use of the lot to employees and patrons of such facilities shall be included in the plan.

- d) Plans for fleet vehicle operations shall include the numbers and types of vehicles in the fleet and the estimated average number of vehicle miles operated in the major metropolitan area to which the plan applies. Plans shall describe the manner in which an orderly curtailment of operations will be effected on the first day and cessation on the second calendar day of the applicable alert. If fleet vehicle operations include delivery of food, medicine or perishable goods or emergency or necessary maintenance services of any kind, plans shall include procedures for exempting such services from curtailment and cessation.
- e) Plans for government agencies shall include types of services rendered, number and location of employees engaged in such services and the estimated number of employees driving to offices or driving in performance of the services. Plans shall include the methods by which orderly cessations of non-essential services will be effected to meet the requirements of Appendix B. Where government agencies are engaged in essential services, plans shall indicate the nature and magnitude of the services and procedures to exempt such services from cessation during any alert or emergency.

Section 244.145 Processing Procedures

- a) Local agencies designated to receive and evaluate episode action plans required by this Part shall file such plans with the Agency within 30 days following their receipt.
- b) If any plan does not conform with or effectively implement the requirements of this Part, the Agency shall disapprove the plan, state the reasons for disapproval and require the plan to be revised.
- c) During alerts or emergencies, plans required by this Part shall be made available at the facility in question to any person authorized to carry out the provisions of this Part.

SUBPART D: EPISODE STAGES

Section 244.161 Watch, Alert and Emergency Levels:

Pollutant	Aver-aging Time	Advisory	Watch	Yellow Alert	Red Alert	Emergency
Sulfur dioxide (ppm)	2-hour	--	0.10	--	--	--
	4-hour	--	--	0.30	0.35	0.40
Particulate Matter (COM)	2-hour	--	5.0	--	--	--
	24-hour	--	--	3.0	5.0	7.0
Product (sulfur dioxide & particulate matter)	2-hour	--	1.0	--	--	--
	4-hour	--	--	1.0	2.0	2.4
Carbon Monoxide (ppm)	24-hour	--	--	0.20	0.30	1.20
	8-hour	--	30	--	--	--
Ozone (ppm)	2-hour	--	15	30	40	--
	1-hour	--	--	0.20	0.30	0.50
Nitrogen dioxide (ppm)	2-hour	--	0.40	--	--	--
	1-hour	--	--	0.60	1.20	1.60
	24-hour	--	--	0.15	0.30	0.40

Section 244.162 Criteria for Declaring an Advisory or Watch

The Director or his designated representative shall declare an air pollution watch or, in the case of ozone, an advisory whenever:

- An air stagnation advisory is received for any area within the State;
- Any advisory, watch or yellow alert level is equaled or exceeded at any monitoring station;
- Atmospheric conditions, or expected contaminant emissions, are such that concentrations can reasonably be expected to remain at or above the watch or yellow alert level for 24 or more hours; or
- For ozone, atmospheric conditions, or expected contaminant emissions, are such that concentrations can reasonably be expected to reoccur at any advisory, or yellow alert, level on the following calendar day.

Section 244.163 Criteria for Declaring a Yellow Alert

The Director or his designated representative shall declare a yellow alert whenever:

- Any yellow alert level is equaled or exceeded at any monitoring station; and

b) An air pollution advisory or watch has been in effect for 4 hours in the area for which the yellow alert is to be declared; and

c) Atmospheric conditions, or expected contaminant emissions, are such that concentrations can reasonably be expected to remain at or above the yellow alert level for 12 or more hours; or

d) For ozone, atmospheric conditions, or expected contaminant emissions, are such that concentrations can reasonably be expected to reoccur at a yellow alert level on the following calendar day.

Section 244.164 Criteria for Declaring a Red Alert

The Director or his designated representative shall declare a red alert whenever:

- Any red alert level is equaled or exceeded or any yellow alert level has been equaled or exceeded continuously for the preceding 24 hour period at any monitoring station; and
- A yellow alert has been in effect for 4 hours in the area for which the red alert is to be declared; and
- Atmospheric conditions, or expected contaminant emissions, are such that concentrations can reasonably be expected to persist for 12 or more hours; or
- For ozone, atmospheric conditions, or expected contaminant emissions, are such that concentrations can reasonably be expected to reoccur at a red alert level on the following calendar day.

Section 244.165 Criteria for Declaring an Emergency

The Director or his designated representative shall declare an emergency whenever:

- Any emergency level is equaled or exceeded or any red alert level has been equaled or exceeded continuously for the preceding 24 hour period at any monitoring station; and
- A red alert has been in effect for 12 hours in the area for which the emergency is to be declared; and
- Atmospheric conditions, or expected contaminant emissions, are such that concentrations can reasonably be expected to persist or increase for 12 or more hours; or
- For ozone, atmospheric conditions, or expected contaminant emissions, are such that concentrations can reasonably be expected to reoccur at an emergency level on the following calendar day.

Section 244.166 Criteria for Terminating Watch, Alert and Emergency

The Director or his designated representative shall terminate any watch, alert or emergency stage when the applicable level specified in Section 244.161 no longer prevails and when in his judgment atmospheric conditions and expected contaminant emissions are such as to warrant discontinuance or lowering of that watch, alert or emergency stage.

(Source: Amended at 6 Ill. Reg. 5804, effective April 22, 1982)

Section 244.167 Episode Stage Notification

Whenever an advisory, a watch, an alert or an emergency stage is declared or terminated, the Agency or local agency designated by the Agency shall notify:

- a) Concerned personnel of the Agency and of federal, local and other State agencies;
- b) Facilities required to make preparations or take actions of major emission reducing consequence;
- c) The public by radio, television and other means of rapid communication..

Section 244.168 Contents of Episode Stage Notification

Notifications shall contain: time and date of issuance, the names of agencies or persons responsible for issuance and the beginning and expected ending time of any watch, alert or emergency stage. Alert and emergency notifications shall also contain details about the pollutant(s) for which notification is made, such as maximum pollutant levels reached and predicted, geographical areas affected, specific pollution-reducing instructions to the public and to direct or indirect sources of air contaminants, as well as advice to persons who may be affected by the elevated pollution levels.

Section 244.169 Actions During Episode Stages

- a) Watch and Advisory Actions. When an air pollution advisory or watch is in effect, the Agency and local agencies designated by the Agency shall:
 - 1) Coordinate their activities and place their operational staffs in a state of increased readiness except that in the event of an advisory the Agency need not monitor on a 24 hour basis.
 - 2) Promptly verify the operation of their air monitoring instrument networks and monitor data from such instrument networks during all periods when there is reasonable likelihood of yellow alert levels occurring.

- 3) Evaluate atmospheric conditions and contaminant emissions data and monitor changes in such conditions and data during all periods when there is reasonable likelihood of yellow alert levels occurring.

- b) Yellow Alert, Red Alert and Emergency Actions. When a yellow alert, red alert or emergency is in effect, personnel of the Agency, local agencies designated by the Agency, direct and indirect emission sources and such other persons as are required to take actions according to this Part shall take all actions required of them in Appendix D insofar as such actions are applicable to the declared episode stage and contaminant or product for which the episode stage has been declared.

- 1) Actions by local agencies designated by the Agency shall be in accordance with their episode operations plan if such plan has been approved by the Agency.
- 2) Actions by direct or indirect sources of emissions shall be in accordance with their episode action plan if such plan has been approved by the Agency.

**Appendix A
Rule into Section Table**

Rule	Section
401.....	244.101
402(a).....	244.102
402(b).....	244.103
402(c).....	244.104
402(d).....	244.105
402(e).....	244.106
402(f).....	244.107
402(g).....	244.108
402(h).....	244.109
403.....	244.121
404(a).....	244.141
	Appendix C
404(b).....	244.142
404(c).....	244.143
404(d).....	244.144
404(e).....	244.145
405(a).....	244.161
405(b).....	244.162
405(c).....	244.163
405(d).....	244.164
405(e).....	244.165
405(f).....	244.166
406(a).....	244.167
406(b).....	244.168
407.....	244.169
Tables 1 and 2 - Part IV.....	Appendix D

**Appendix B
Section into Rule Table**

Section	Rule
244.101.....	401
244.102.....	402(a)

Section	Rule
244.103.....	402(b)
244.104.....	402(c)
244.105.....	402(d)
244.106.....	402(e)
244.107.....	402(f)
244.108.....	402(g)
244.109.....	402(h)
244.121.....	403
244.141.....	404(a)
244.142.....	404(b)
244.143.....	404(c)
244.144.....	404(d)
244.145.....	404(e)
244.161.....	405(a)
244.162.....	405(b)
244.163.....	405(c)
244.164.....	405(d)
244.165.....	405(e)
244.166.....	405(f)
244.167.....	406(a)
244.168.....	406(b)
244.169.....	407
Appendix A.....	Added in Codification
Appendix B.....	Added in Codification
Appendix C.....	404(a)
Appendix D.....	Tables 1 and 2 - Part IV

Appendix C Past Compliance Dates

Rule 404(a)

The current version of these rules became effective April 19, 1976. Episode action plans were required by October 19, 1976.

Appendix D

Required Emission Reduction Actions**
Sulfur Dioxide, Particulate, Product,
Nitrogen Dioxide, and Carbon Monoxide

YELLOW ALERT

- 1) The Agency shall notify the public by radio and/or television that a Yellow Alert is in effect; that the public is required to take action in accordance with these regulations; that the public is requested to avoid the unnecessary use of automobiles and of electricity; and that persons suffering from respiratory or heart conditions should take appropriate precautions.
- 2) Electric power generating stations shall effect the maximum feasible reduction of emissions by utilizing fuels which have low ash content and less than 1.0% sulfur by

**During each stage only those actions which cause a reduction of emissions of contaminants for which such stage has been declared are required. c.f. 35 Ill. Adm. Code 244.102 through 244.109, and 244.163(b).

weight (1.5% in the case of fuel oil), provided, however, that emission from such stations shall not exceed the applicable emission standards and limitations of 35 Ill. Adm. Code 214; by limiting soot blowing and boiler lancing, where essential, to periods of maximum atmospheric turbulence; by diverting power generation to stations outside the area for which the Alert is in effect; or by any other means approved by the Agency. Such actions will be in accordance with the Yellow Alert Plan if such plan has been approved for that station.

3) Facilities having fuel combustion emission sources with a total rated capacity in excess of 10 million btu/hr and burning coal and/or fuel oil shall reduce emissions by utilizing fuels which have low ash content and less than 1.0% sulfur weight (1.5% in the case of fuel oil) provided, however, that emissions from such facilities shall not exceed the applicable emission standards and limitations of 35 Ill. Adm. Code 214; by limiting soot blowing and boiler lancing, where essential, to periods of high atmospheric turbulence; or by any other means approved by the Agency. If fuels of low ash and sulfur content are not available, such facilities with the exemption of residences, hospitals, and other essential facilities as designated by the Agency, shall curtail fuel burning to the maximum degree consistent with avoiding injury to persons or severe damage to property. Such actions will be in accordance with the Yellow Alert Plan if such plan has been approved for that facility.

4) Facilities engaged in manufacturing required to submit Yellow Alert plans shall curtail or defer production and allied operations to the extent necessary to avoid emissions in excess of those which would be discharged if the facility were operated in accord with the limitations prescribed by the regulations limiting emissions, insofar as such reductions can be achieved without creating injury to persons or severe damage to property. Such reductions shall be made notwithstanding any variance or program of delayed compliance with the regulations, and shall be in accord with the Yellow Alert plan if such plan has been approved for that facility.

5) All open burning and all incineration except as provided below are provided. Certain burning of explosive or pathological wastes may be exempted from this restriction by the Agency in writing upon specific written application.

6) Incinerators meeting the emission standards and limitations of this Chapter may be operated only during the hours of maximum atmospheric turbulence as designated by the Agency.

RED ALERT

- 1) All actions required during the Yellow Alert shall be continued.

- 2) The Agency shall notify the public by radio and/or television that a Red Alert is in effect; that the public is required to take action in accordance with these regulations; that the public is requested to avoid the unnecessary use of automobiles and of electricity; and that persons suffering from respiratory or heart conditions should take appropriate precautions.
- 3) All incineration and all open burning are prohibited. Certain burning of explosive or pathological wastes may be exempted from these restrictions by the Agency in writing upon specific written application.
- 4) Facilities engaged in manufacturing and required to submit Red Alert Plans shall curtail any production, including the generation of process steam, which emits contaminants into the atmosphere, to the greatest extent possible without causing injury to persons or severe damage to equipment. Such action shall be in accordance with the Alert Plan if such plan has been approved for that facility.

EMERGENCY

- 1) All actions required during the Yellow Alert and Red Alert shall be continued.
- 2) The unnecessary use of electricity, such as for decorative or amusement purposes, is prohibited.
- 3) The use of motor vehicles is prohibited except for essential uses such as police, fire, and health services, delivery of food or essential fuel, waste collection, utility or pollution control emergency repairs, and such comparable uses as may be designated by authorized Highway and Law Enforcement Officials in accordance with the Illinois Emergency Highway Traffic Regulations Plan.
- 4) All aircraft flights leaving the area of the Emergency are forbidden except for reasons of public health or safety as approved by the Agency in advance.
- 5) Buildings shall be maintained at temperatures no greater than 65°F except for hospitals and for other buildings approved by the Agency for reasons of health or severe damage to property.
- 6) All manufacturing activities shall be curtailed to the greatest extent possible without causing injury to persons or severe damage to equipment.
- 7) All facilities or activities listed below shall immediately cease operations:

Mining and quarrying, contract construction work, and wholesale trade establishments.

Schools, except elementary schools which shall close at the end of the normal school day and not re-open until the Emergency is terminated.

Government agencies except those needed to administer air pollution alert programs and other essential agencies determined by Agency to be vital for public safety and welfare.

Retail trade stores except those dealing primarily in the sale of food or pharmacies.

Real estate agencies, insurance offices and similar business.

Laundries, cleaners and dryers, beauty and barber shops and photographic studios.

Amusement and recreational service establishments such as motion picture theaters.

Automobile repair and automobile service garages.

Advertising offices, consumer credit reporting, adjustment and collecting agencies, printing and duplicating services, rental agencies, and commercial testing laboratories.

REQUIRED EMISSION REDUCTION ACTIONS - OZONE -

1. GENERAL

Yellow Alert - All Advisory Actions continue. Government officials, public and submitters of Action Plans notified.

Red Alert - All Advisory and Yellow Alert actions continue. Government officials, public, and submitters of Action Plans notified.

Emergency - All Advisory, Yellow Alert, and Red Alert actions continue. Government officials, public, and submitters of Action Plans notified.

2. VEHICLES PARKING LOTS ROAD REPAIRS

Yellow Alert - Public requested to avoid the unnecessary use of automobiles.

Red Alert - Fleet vehicles, other than mass transit vehicles and vehicles used for the delivery of grocery and pharmaceutical products, essential fuel, for emergency medical services and for such comparable uses as designated by the Agency, immediately curtail operations to the greatest extent possible in or into the area affected by the Red Alert and cease operations on the second calendar day of the Alert.

Parking lots for more than 200 vehicles, except for lots predominately serving residences, grocery stores, medical facilities, rail, bus and air transportation terminals, lots provided by employers primarily for employees, and comparable lots as designated by the Agency shall immediately curtail operations and close on the second calendar day of the Alert.

Road repair and maintenance not necessary for immediate safety and which, if suspended, will expedite the flow of vehicular traffic is prohibited.

Emergency Motor vehicle operation in or into the area affected by the Emergency is prohibited except for essential uses such as police, fire, and health services, and comparable uses designated by the Illinois Emergency Highway Traffic Regulation Plan. All aircraft flights leaving the area of the Emergency are forbidden except for reasons of public health or safety.

3. MANUFACTURING AND OTHER FACILITIES HAVING PROCESS EMISSION SOURCES

Yellow Alert - Facilities engaged in manufacturing review operations and Action Plans, inspect emission control devices, determine areas of delayable operations; and from such steps revise operations so as to cause greatest feasible reduction in emissions short of adversely affecting normal production.

Red Alert - All facilities with process or fuel combustion emission sources emitting a total of more than 100 tons per year or 550 pounds per operating day of organic material or of nitrogen oxides, and all other facilities not in compliance with the organic material and nitrogen oxides emissions standards of Part 2 of this Chapter, curtail all such sources to the greatest extent possible short of causing injury to persons, severe damage to equipment, or an increase in emissions.

Emergency - All operations curtailed to the greatest extent possible short of causing injury to persons or severe damage to equipment.

4. ELECTRIC POWER GENERATORS AND USERS

Yellow Alert - Electric power generating stations burning fossil fuels requested to reduce emissions in and into the affected area to the greatest extent practicable by adjusting operations system wide or by any other means approved by the Agency.

Public request to avoid unnecessary use of electricity.

Red Alert - Electric power generating stations burning fossil fuels required to take all Yellow Alert Actions and in addition discontinue power generation for economy sales and service to interruptable customers, and maximize purchase of available power.

Unnecessary use of electricity, such as for decorative or advertising purposes is prohibited.

Emergency - Electric power generating stations burning fossil fuel continue Yellow Alert and Red Alert actions and, in addition, effect the maximum feasible reduction of

emissions by reducing voltage 2.5% system wide, purchase all available emergency power, and requesting large customers (500 kw) to reduce their electric demand or by any other means approved by the Agency.

5. OFFICES, BUILDINGS, AND OTHER COMMERCIAL AND SERVICES OPERATIONS

Yellow Alert - Public requested to limit space heating to 65°F, air conditioning to 80°F.

Red Alert - Public, industrial and commercial space heating limited to 65°F; air conditioning to 80°F except for hospitals and for other buildings approved by the Agency.

Governmental agencies except those needed to administer essential programs close.

Schools close except elementary schools, which close at the end of the normal school day and do not reopen until the Alert is terminated.

The loading of more than 250 gallons of volatile organic material into any stationary tank, railroad tankcar, tank truck, or tank trailer is prohibited except where an integral part of an industrial operation allowed during Red Alert.

Emergency - All facilities or activities listed below immediately cease operations: mining and quarrying, contract construction work, wholesale trade establishments, retail trade stores except those dealing primarily in the sale of food or pharmaceuticals, real estate agencies, insurance offices and similar businesses, laundries, cleaners and dryers, beauty and barber shops and photographic studios. Amusement and recreational service establishments such as motion picture theaters, automobile repair and automobile service garages, advertising offices, consumer credit reporting, adjustment and collection agencies, printing and duplicating services, rental agencies and commercial testing laboratories.

6. REFUSE BURNERS

Yellow Alert - Governmental or commercial installations established primarily for the burning of refuse shall postpone delayable incinerations, all other incineration and all open burning prohibited.

Red Alert - All incineration prohibited.

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE B: AIR POLLUTION

CHAPTER 1: POLLUTION CONTROL BOARD

**SUBCHAPTER 1: AIR QUALITY
STANDARDS AND EPISODES**

**PART 245
ODORS**

Section	
245.100	Definitions
245.101	Incorporation by Reference
245.120	Inedible Rendering Process
245.121	Objectionable Odor Nuisance Determination

Appendix A: Rule Into Section Table
Appendix B: Section Into Rule Table

AUTHORITY: Implementing Section 10 and authorized by Section 27 of the Environmental Protection Act (III, Rev. Stat. 1981, ch. 111 1/2, pars. 1010 and 1027).

SOURCE: Adopted as Chapter 2: Air Pollution, Part VIII: Odors, in R71-23, 4 PCB 191, filed and effective April 14, 1972; codified at 7 III. Reg. 13635.

Section 245.100 Definitions

"Animal and Marine Matter": any product or derivative of animal life.

"Food Service Establishment": any fixed or mobile restaurant; coffee shop; cafeteria; short order cafe, luncheonette, grill; tea room; sandwich shop; soda fountain; tavern; bar; cocktail lounge; nightclub; roadside stand; industrial feeding establishment; private, public, or non-profit organization or institution routinely serving food; catering kitchen; commissary or similar place in which food is placed for sale or served on the premises or elsewhere; and any other eating or drinking establishment or operation where food is served or provided for the public; with or without charge.

"Odor Concentration": the number of cubic feet that one cubic foot of sample will occupy when diluted to the odor threshold. It is a measure of the number of odor units in one cubic foot of the sample. It is expressed in odor units per cubic foot.

"Odor Unit": one cubic foot of air at the odor threshold.

"Person": any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, political subdivision, state agency, or any other legal entity, or their legal representative, agent or assigns.

"Process": any action, operation, or treatment and the equipment used in connection therewith.

and all methods or forms of manufacturing or processing that may emit smoke, particulate matter or gaseous matter.

"Rendering": any heating process, including cooking, drying, dehydrating, digesting, evaporating and protein concentrating of animal or marine matter.

Section 245.101 Incorporation by Reference

The following is incorporated by reference: "Quantitative Odor Measurement" by John L. Mills, et al, presented at the 56th Annual Meeting of APCA, Sheraton Cadillac Hotel, June 9-23, 1963, Detroit, Michigan. (Journal of the Air Pollution Control Association, Volume 13, No. 10, October 1963, Pages 467-475).

(Source: Added and codified at 7 III. Reg. 13635)

Section 245.120 Inedible Rendering Process

a) The provisions of this Part shall not apply to any device, machine, equipment, or other contrivance used exclusively for the processing of food for human consumption and to food service establishments.

b) No person shall operate or use any device, machine, equipment, or other contrivance for the inedible rendering of animal or marine matter unless all gases, vapors and gas entrained effluents from these processes shall be controlled in such manner as to effectively abate any objectionable odor nuisance. In the event that the rendering processes of more than one company are contributing to the objectionable odor nuisance, abatement shall be deemed effective when the odor concentration from each process is not more than 120 odor units/cubic foot as determined by Mills adaptation of ASTM D-1391-S7.

c) An objectionable odor nuisance exists when a trained state inspector, upon the receipt of a complaint from one resident or property owner in the area affected shall determine that these odors cause a nuisance as outlined in Section 245.121.

Section 245.121 Objectionable Odor Nuisance Determination

An objectionable odor nuisance exists:

a) On or adjacent to residential, recreational, institutional, retail sales, hotel or educational premises when odor is detectable in the ambient air after it is diluted with eight volumes of odor-free air as measured by the Scentometer;

b) On or adjacent to industrial premises when odor is detectable in the ambient air after it is diluted with twenty-four volumes of odor-free air as measured by the Scentometer;

- c) On or adjacent to premises other than those above when odor is detectable in the ambient air after it is diluted with sixteen volumes of odor-free air as measured by the Scentometer;
- d) When concurrent determinations made by three trained inspectors as outlined above in any given one hour period and at intervals of not less than fifteen minutes result in two positive determinations in each series of three determinations; and
- e) Provided that any quantitative odor level measurements taken to arrive at a determination that an objectionable odor nuisance exists shall be at or beyond the property line or at or near places where people live or work.

**Appendix A
Rule into Section Table**

<u>Rule</u>	<u>Section</u>
801.....	245.100
802(a)-(c).....	245.120
802(d).....	245.121

**Appendix B
Section into Rule Table**

<u>Section</u>	<u>Rule</u>
245.100.....	801
245.101.....	Added in Codification
245.120.....	802(a)-(c)
245.121.....	802(d)
Appendix A.....	Added in Codification
Appendix B.....	Added in Codification

Updated July 19, 1989

SUBTITLE B - AIR POLLUTION

Since the printing of this volume, amendments have been made to this subtitle. These can be found in the Board's Opinions and Orders, as well as in the Illinois Register, as identified below:

<u>Docket No.</u>	<u>Date of Order</u>	<u>Sections Affected</u>	<u>Action</u>	<u>Ill. Reg. Publication</u>	<u>Effective Date</u>
R88-23	5-25-89	211.22	Amended	13 Ill. Reg. 10862	6-27-89
R88-23	5-25-89	215.104 215.105 215.420 215.430 215.432 215.435 215.437 215.438 215.439 215. App.D		13 Ill. Reg. 10893	6-27-89

No changes to other sections since date of printed publication effective through February 6, 1989.

ILLINOIS POLLUTION CONTROL BOARD

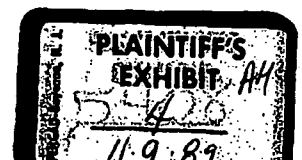
January 6, 1971

In the Matter of:)
) #R71-16
ASBESTOS REGULATIONS)

OPINION OF THE BOARD ON ADOPTION OF REGULATIONS (BY MR. LAWTON):

Proposed regulations relating to asbestos and spray insulation were published in Newsletter #24 dated June 14, 1971. Hearings on these regulations were held in Granite City on October 6, in Chicago on October 15, and in Waukegan on October 19, 1971. Notice of the proposed final draft, together with the form of regulation proposed for adoption, were published on December 5, 1971 in Newsletter #37. Written comments were invited and a small number have been received. We adopt the regulations today in the form as published in Newsletter #37, modified by some minor clarifying language. Our principal concern in these regulations is to prevent or limit the emissions into the atmosphere resulting from the use of asbestos and asbestos-bearing products and the resulting disastrous pathological consequences resulting from ingestion and inhalation of this mineral. This Opinion will consider the source and types of asbestos, the uses of asbestos and asbestos bearing products, the cause of asbestos emissions and their demonstrated impact upon the health of the community, the measurement and monitoring of asbestos fibers and the means available for emission abatement and control. The modifications made in the substantive provisions of the regulations, between their original proposal and ultimate adoption, will likewise be discussed.

The term "asbestos" is a name given to a variety of natural occurring mined silicates of a virtually indestructible character. The major asbestos minerals are chrysotile, crocidolite, amosite and anthophyllite. Of lesser importance are tremolite and actinolite. These minerals differ in their metallic elemental content, range of fiber diameter, flexibility and harshness, tensile strength, surface properties and other attributes that determine their industrial uses and which, in turn, affect their respirability, retention and biologic reactivity. Over 90% of what is mined and commercially used as asbestos is chrysotile, sometimes referred to as "serpentine" asbestos. The remaining minerals are collectively referred to as amphiboles. The United States uses about one-fourth of the world production of this substance, most of which is imported from Canada and Africa. (Ex. 3, Air Pollution Aspects of Asbestos, U. S. Department of HEW, September, 1969, Litton Report. Ex. 19, Airborne Asbestos, National Academy of Sciences, 1971.) Asbestos deposits of commercial value in the United States are located principally in Vermont, California, Arizona and North Carolina. No



commercially viable sources of asbestos are found in Illinois, a fact which might otherwise invoke a far more comprehensive set of regulations. The uniqueness and industrial usefulness of the mineral is a consequence of its flexibility, tensile strength, non-inflammability and its resistance to acids, alkalies and electricity.

Some asbestos fibers get into the atmosphere from non-industrial sources. See Asbestos Air Pollution Control, Institute for Environmental Quality, prepared by Colin F. Harwood, Ex. 20. These range from rock outcrops, farming and excavation for construction purposes to the use of talcum powder. Emissions from rock outcrops occur as a consequence of natural eroding processes such as earthquakes, temperature, wind and rain. Farming of soils in areas containing asbestos rock will likewise cause emission of these fibers. Construction requiring excavation in asbestos containing rock for housing, pipe-laying and road construction constitute a source of asbestos emission into the atmosphere. Recent research indicates that talcum powder, while basically a mineral rock dust, does contain fibrous material, and represents a threat of asbestos bodies.

Obviously, the thrust of the regulations does not seek to control asbestos emissions from these sources. Further, the absence of asbestos mining in Illinois eliminates this activity as a source of danger. It is the processing of asbestos in manufacturing and the use and fabrication of asbestos and asbestos and fiber containing products to which the regulations are principally directed. The health dangers inherent in asbestos inhalation arise at the start of the asbestos processing cycle and include the loading and storage of milled asbestos, the transporting of bagged asbestos to the opening area, fluffing of compacted fibers and the mixing of asbestos fibers with other materials. (Ex. 20, Harwood, Page 7.)

Principal user of all grades and varieties of asbestos fibers is the asbestos-cement industry producing asbestos-cement pipe used to convey water, sewage, industrial and gaseous products and serving as conduits for electrical and telephone cables. Other asbestos-cement industry products include roofing shingles, building boards, marine board and laboratory bench tops. To manufacture these products willowed fibers are dry-mixed with fine-ground silica, and a slurry formed by addition of water. The end products of these industries require finishing steps which again generate asbestos emissions. These include sawing, turning, drilling and sanding, each producing large quantities of asbestos-laden dust, and some clinging to the surface of the items being worked upon, again becoming a potential emission source.

A second major use of asbestos fibers is in the manufacture of asbestos vinyl floor tile and asbestos asphalt road paving compounds. Here again, emissions result from the manufacture of these products and to a lesser degree from the use and ultimate processing

and fabrication. Asbestos papers represent a great variety of products used for roofing, insulation, linings, heat and chemical resistant insulation for pipes and automotive exhaust insulation. Pre-processing of asbestos fibers and the mixing of asbestos paper ingredients constitute an emission source. Again, the ultimate cutting and processing represents a further source of asbestos emissions into the atmosphere.

- Asbestos paint and coating fillers utilize asbestos "shorts" recovered from the milling process where their relative indestructibility increases the density or opaqueness of paint. Where asbestos bearing paint is used in the spraying operation, the potential for emissions is substantial. Likewise, the wearing and aging of the paint becomes an additional source of emissions.

Asbestos friction materials and gaskets represent a wide use of these minerals. Emissions result from the fabrication, molding and trimming of these products. Asbestos is also used in the production of textile products. The term "roving" refers to the finished textile product, from which yarns are produced. Blended fibers are carded in machines where the operation is essentially open, presenting a serious emission source due to the combing action of the machine. Both the production of this product and its ultimate use present substantial sources of emission.

The spraying of asbestos for insulation constitutes one of the widest uses of the product and, undoubtedly, one with the greatest danger potential, not only to the health of the workers involved but, to the public at large. Prepared asbestos cement slurry is pumped to the nozzle of a gun and sprayed directly to the surface, or alternatively a dry mixture of asbestos cement is pumped to the gun and mixed with water during the spraying operation. The material comprising the asbestos insulation is formed by combining asbestos, cement, and rock wool in proportions of 30%, 15% and 55%, respectively. The mineral most commonly used is amosite, possessing superior thermal properties. If color is required, crocidolite or chrysotile fibers are used. Among the unique properties associated with asbestos cement insulation are low thermal conductivity and inflammability and high strength, together with good acoustic features, low cost, easy thickness control and application. Initial cause of emissions from this product results from dry mixing of the asbestos cement and mineral wool components. Care must also be exercised during the storage and transportation of the bag mixture to prevent further emissions. At the construction site, the bags are open and the dry material emptied into hoppers where further emissions occur. The most significant source of emissions, of course, is in the spraying operation itself. High dust concentrations can be seen and measured at construction sites utilizing asbestos spraying methods. Our regulations impose an outright ban on this activity and impose stringent house-keeping requirements on all spraying of non-asbestos fibrous materials

Additional emission of asbestos results from the use of pre-formed asbestos sections or blocks for insulation of pipes and boilers, and in the use of materials applied in a wet or slurry state. Asbestos cement products including roofing shingles, building boards and drain pipes have sealed surfaces and do not dust easily. However, emissions may result from their cutting or breaking. Other asbestos products used in construction and industry are asbestos paper, blankets, rope and sealing compounds. Emissions resulting from the use of these products depend on the type of material being fabricated, the amount and character of fabrication required, the location and nature of the site and the quantity of material being processed. Tightly bonded composites will have less potential for emissions than those loosely bound. See R.116 and following testimony of Pundsack; Thompson, Ex. 5, Asbestos as an Urban Air Contaminant; Ex. 4, Selikoff, Asbestos, "Environment", March, 1969. Twenty-seven industrial concerns in Illinois manufacture products using asbestos. Exhibit 20, Harwood, p. 56. Asbestos products are used in virtually all building construction and utility installation.

A particularly obnoxious source of asbestos emission with extreme difficulty of control is the demolition of existing structures. Asbestos insulation and products present in demolished structures generate substantial emissions into the atmosphere where control is difficult and the impact on persons in the vicinity, both workers and residents, is extreme.

For years, asbestos has been incorporated in building materials. In some forms of insulation and wallboard, the amount present is less than 20% of the total, but other materials consist principally or entirely of asbestos. When a building is demolished, areas of loosened asbestos are open to the ambient air and fibers are emitted. In general, single-family residential structures contain relatively small amounts of asbestos insulation. Demolition of industrial and commercial buildings that have been fireproofed with asbestos-containing materials will prove to be an emission source in the future, requiring control measures.

Asbestos is emitted into the atmosphere from brake linings and clutches. While these are unquestionably substantial sources of asbestos emissions in the ambient air, the character and potential of these sources have not been sufficiently documented to a point where we feel they can properly be the subject of regulatory action and control at the present time. Harwood, Ex. 20, p. 22 through 28. See Ex. 8 "Brake Lining Decomposition Products", Lynch, Journal of the Air Pollution Control Association, December 19, 1968.

Having described the principal sources of asbestos emissions we next consider their pathological implications. The Litton Report states, Ex. 3, p. 40:

"Asbestos is an air pollutant which carries with it the potential for national or worldwide epidemic of lung cancer or mesothelioma of the pleura or peritoneum. Asbestos bodies have been observed in random autopsies of one-fourth to one-half of the population of Pittsburgh, Miami and San Francisco and will probably be found in the people of every large city. ...the effects of the asbestos being inhaled today may not be reflected in the general health of the population until the 1990's or the next century."

The objective of the regulations must be two-fold, first, to protect those who by occupational activity or physical contiguity, either to the asbestos use or the asbestos user become the potential victims of this pollutant, in other words, to protect those with both occupational and environmental orientation; and secondly, to provide measures that will protect the ambient air against an asbestos build-up that will have adverse effect upon the general public beyond those occupationally or environmentally orientated at the source. As stated by Thompson; (Ex. 5),

"Because asbestos is virtually indestructible and so many of the asbestos containing products are used in towns, the average urban dweller is theoretically exposed to the inhalation of asbestos fibers on a residential basis."

After reviewing the incidence of death among asbestos workers, exposed to asbestos dust, over a 20-year period, Selikoff, Ex. 4, states:

"These experiences highlight one portion of the current spectrum of asbestos disease. It is now recognized that direct occupational exposure to asbestos results in a hazard much more significant than formerly appreciated. In the last several years, however, additional problems have been recognized which add another dimension: the possibility that the utilization of asbestos is associated with a much wider risk, perhaps one of the community at large. This is less well defined, much less well documented, but because of its potential importance, of considerable concern."

It is in this context that our regulations must be structured.

The onset of morbidity and lethal diseases have been attributed to asbestos inhalation and ingestion. Asbestosis, pleural calcification, lung cancer, and mesotheliomas are known to result from exposure to asbestos. Surveys of people living or working near asbestos mines and factories have revealed that many nonoccupational cases of asbestosis and mesothelioma have occurred either from asbestos in the polluted air or from asbestos carried home on the clothing of workers.

The fate of the asbestos fiber once it is inhaled and deposited in the lung is still questionable. The short fibers, less than .5 microns in length, have in the past been ignored, probably because they are much too narrow to be visible under a light microscope. The longer fibers are encrusted in an iron-bearing protein form termed "asbestos bodies," which are more easily visible.

Among asbestos workers, evidence of pulmonary asbestosis, also known as asbestotic pneumoconiosis, an asbestos induced scarring of the lungs, is common. This condition results in a diffuse fibrosis, usually in the lower lobes of the lung. Pulmonary asbestosis has been called a monosymptomatic disease, characterized by painful breathing and lung disorder. See Nicholson statement, Ex. 21, R.35 and following. Litton Ex. 3, p. 4 and following.

Asbestosis usually develops after long exposure to high concentrations of asbestos dust, the risk varying directly with the length of exposure and the dust concentration. Following continued exposure to high concentrations of dust, asbestosis may develop fully in 7 to 9 years and may cause death as early as 13 years after the onset of exposure. The common exposure period before recognition of asbestosis as observed among asbestos workers is 20 to 40 years, with death following about 2 to 10 years later. Once established, asbestosis progresses even after the exposure to dust ceases: illness or death can occur long after exposure to concentrations not producing immediate effects.

The prolonged latency period between exposure and the first signs of asbestosis makes it difficult to establish dose-time relationships.

In 1946, 700 cases of asbestosis were found in Germany among a total of approximately 8,000 employees in the asbestos industry. 125 cases of asbestosis of the lung in X-ray examinations of 476 asbestos workers were found in one company in Finland. The occurrence of asbestosis in members of this worker group appears to rise with the duration of the employment: A morbidity of 80 percent among English asbestos workers with over 20 years of employment has been reported. Selikoff and others investigated 1,522 asbestos insulation workers in the New York-New Jersey metropolitan area. Among 392 individuals examined more than 20 years from the onset of exposure, X-Ray evidence of asbestosis was found in 339. In half of these, the asbestosis was moderate or extensive. In individuals with less than 20 years of exposure, radiological evidence of asbestosis was less frequent and when present, less likely to be extensive.

The most common complication of asbestosis is cancer of the lung. However, cancer of the lung apparently induced by asbestos may appear unaccompanied by asbestosis.

The association of lung cancer with exposure to asbestos dust has been the subject of many investigations in recent years and extensively documented in the literature. See Ex. 3, Litton; Ex. 19 Nat'l Acad. and a correlation between asbestosis and lung cancer appears definite.

It is recognized that cancer of the lung produced by asbestos needs further study. The latent period between exposure and evidence of carcinoma may be even longer than for asbestosis. Little is known about the dose-time relationship. Cases of lung cancer have been observed when only a very short exposure or no exposure to asbestos was known. Furthermore, the low number of "asbestos bodies" observed in one-fourth to one-half of the urban population may be sufficient to cause cancer. Because the long "asbestos bodies" remain in the lungs, a person who has inhaled asbestos may carry the potential for the rest of his life to develop carcinoma of the lung. Moreover, it has not been determined whether more than one fiber is necessary to induce a malignant tumor. It has been suggested that the probability of cancer induction is proportional to the number of asbestos fibers, number of susceptible cells, the concentration of carcinogens on the fibers, and the time from exposure.

Why asbestos is carcinogenic is not clearly understood. At least three hypotheses have been advanced:

1. That the fibers act as a physical irritant which after 20 to 30 years of constant irritation induces a tumor.
2. That the fibers contain small amounts of carcinogens, such as benzo(a)pyrene, nickel, and chromium which are eluted from the fibers by the serum in the lungs.
3. That the fibers accumulate in the lung and are immobilized as "asbestos bodies" which disintegrate after 20 to 40 years. The resulting free particles cause asbestosis or carcinoma of the lung.

Primary tumors of the pleura and peritoneum are so rare that for years they were considered to be pathologic curiosities. In 1960 the first large series of cases of diffuse mesothelioma were reported, in South Africa. In trying to explain this mysterious epidemic, "asbestos bodies" were found in the lungs of some of these patients. An association with exposure to the Cape of Good Hope asbestos fields, or the industrial use of asbestos, was established in 32 of 33 patients with histologically proved pleural mesothelioma. The majority of these patients had not actually worked with asbestos but had lived in the vicinity of the mines and mills,

and some had left these areas of exposure as young children. The average period between exposure and development of the tumor was 20 to 40 years. Later studies verified this interrelationship between asbestos exposure and mesothelioma. See Litton Report, Ex. 19, p. 12; Nicholson, Ex. 21; Selikoff, Ex. 4.

In an attempt to determine whether mesothelioma of the serosal surfaces was related in any way to asbestos exposure in the United States, Selikoff studied 307 consecutive deaths among asbestos insulation workers in the Northeastern United States. They found 10 deaths caused by four pleural and six peritoneal mesotheliomas. In addition, these workers had a high death rate attributed to cancer of the stomach, colon, and rectum. Of the 307 deaths, 40.4 percent were attributed to cancer, 5.5 percent to asbestosis, and 54.1 percent to other causes. In a second study, the investigators reviewed 26 consecutive autopsies of patients with asbestosis, and found four mesotheliomas of the pleura and three of the peritoneum.

Mesothelioma is now considered a frequent cause of death among asbestos workers. No attempt has been made to summarize the reports of mesothelioma, since they appear almost weekly in the current literature. So far, however, there appear to be few cases among the general population. Selikoff reviewed 31,652 deaths among the general population of over 1,048,183 in the United States and found only three cases of mesothelioma. Moreover, he points out that asbestos is not the only cause of mesothelioma; it has also been produced by silica and polyurethane.

While the exact cause of lung cancer or pleural peritoneal mesothelioma induced by asbestos is not known, air pollution by other pollutants may accelerate the morbidity. One form of air pollution which is easily studied in individuals is smoking. Selikoff recently studied the mortality of 370 asbestos insulation workers. In this group, 24 men died of lung cancer and all had a history of smoking. See Weiss, Ex. 15, "Cigarette Smoking, Asbestos, and Pulmonary Fibrosis", American Review of Respiratory Disease, Vol. 104, 1971. This rate was eight times greater than the expected mortality rate, with age and smoking habits taken into account.

The recent finding of "asbestos bodies" in one-fourth to one-half of the urban population has added new impetus to the examination of asbestos as a general air pollutant.

An "asbestos body" has been defined as "an elongated golden or reddish-brown structure usually with clubbed ends. The shaft, which often shows a segmented or beaded appearance, is usually straight, but sometimes curvilinear with a tendency toward symmetry. Usually it is from 3 to 5 microns in diameter and 20 to 100 microns in length. The coating contains iron demonstrable by

Perle's stain (Prussian blue reaction), and probably composed of ferritin or ferritin-like material. It may cover the structure completely, masking the central fiber from direct view, or may be incomplete in the central portion of the shaft or in the interstices of the body, revealing an expanse of naked fiber.

There is no doubt that the "asbestos bodies" formed in the lungs of the asbestos workers contain asbestos, and it is probable that some are contained in those found in the lungs of the general population.

Evidence that persons other than those working directly with asbestos minerals are being exposed to asbestos is of several types. Asbestos fibers can be demonstrated in the lungs of persons not occupationally exposed. In a few geographic areas, pathologic changes regarded as representing a reaction to asbestos such as pleural calcification have been found in populations with no history of occupational exposure. Asbestos fibers have been demonstrated in ambient air.

Structures that appear to be fibers coated with a pigmented material were described in lung tissue as early as 1907. These structures were actually fibers coated with hemosiderin. Because those who work with asbestos exhibit them a few months after starting work, it was recognized that they were evidence of exposure, but not of asbestosis. The term "asbestos body" came to be the preferred designation.

As long as the coated fibers were found in persons known to have been occupationally exposed to asbestos, the identity of the central fiber was seldom questioned, although from time to time similar objects were found in persons with no known exposure to asbestos.

Identification of the core fibers has proved to be a formidable technical task. Without fiber-by-fiber analysis, all that can be said is that coated fibers resembling those in asbestos workers are present in most persons in our urban centers. Stripping the coating and analyzing the cores by various techniques can sometimes demonstrate that the cores are asbestos, but the process is tedious and often inconclusive. A more appropriate term is "ferruginous body". Attention is now being directed toward study, not of the ferruginous bodies alone, but of the total fiber content of the lungs, whether such fibers are coated or uncoated.

Evidence is strong that most human lungs harbor thousands or millions of fibers. Some of these are chrysotile asbestos, and other types of asbestos minerals are probably there. In most persons not occupationally exposed to asbestos, the numbers of fibers are relatively small, compared with the numbers found in the occupationally exposed. The systematic application of quantitative techniques,

measuring both coated and uncoated fibers, is needed to define a gradient of accumulated fibers for correlation with incidence of disease, on the one hand, and history of environmental exposure, on the other.

Although there appears no doubt that asbestos fibers are present in many human lungs, there are sources of airborne fibers other than asbestos. Some are probably derived from the burning of leaves and plant products, such as paper, wood and coal. Man-made (mostly vitreous) fibers have also been identified in the sediment isolated from human lungs. Talc, often used generously as a dusting powder, may contain a significant amount of tremolite asbestos fibers.

Information is sparse concerning possible increase of fibers in lungs with increasing use of asbestos and concerning the existence of significant differences between urban and rural populations. Selikoff and Hammond compared lung tissues obtained in 1934 and 1967 and found no significant increase in the proportion containing ferruginous bodies. This suggested that, despite increasing use of asbestos in New York City between 1934 and 1967, fibers of a type producing ferruginous bodies had not been increasing at a corresponding rate. Other commentators, however, have noted an increase over each decade in asbestos bodies in samples of lungs from persons who died in London in 1936, 1946, 1956 and 1966.

A review of the literature related to pleural calcification and asbestos exposure strongly suggests an association between pleural calcification and nonoccupational exposures to asbestos. See Nat'l. Acad., Ex. 19, p. 14.

Industrial experience has shown that prolonged inhalation of asbestos can increase the risk of neoplastic (tumor producing) disease. Examination of lung tissue has made it apparent that a much larger proportion of the general public has inhaled and retained asbestos fibers than had formerly been realized; in fact, most urban dwellers have some such fibers in their lungs. The basic issue is whether the general public, as well as persons working near occupational sources, living in the households of asbestos workers, living in the neighborhoods of asbestos plants, or having occasional random exposures, have a detectably increased risk of malignancy or other disease because of airborne asbestos. What information there is to answer these questions comes either from direct epidemiologic studies of groups with various levels of nonoccupational exposure or by extrapolation from the experience of industrial populations with direct or indirect asbestos exposures.

Two general indices of asbestos exposure are available for use in direct epidemiologic studies of groups not known to be occupationally exposed to asbestos. The first is based on knowledge of each member's place of work and place of residence. Because of the long latent periods of asbestos-related disease, this knowledge must cover each person's whole lifetime. The second is a quantitative estimate of each member's lung content of asbestos fibers. There are few such direct epidemiologic studies, and they are inadequate to answer the questions at issue.

Of 42 persons with mesotheliomas reported in Pennsylvania, 10 had worked in asbestos plants, 8 lived or worked close to an asbestos industry, and 3 were members of families that included asbestos workers; in 11, no history of exposure could be obtained, and the remaining 10 had questionable random exposures. On 165 fatal malignant mesotheliomas known to pathologists in Canada between 1959 and 1968, an association was confirmed with occupational exposure to asbestos, but suggests that the excess was in the manufacture and industrial application of asbestos, rather than in mining and milling. It is apparent that no quantitative conclusions were possible from these studies, which present serious methodologic problems to the epidemiologist. They suggest a risk in household contacts and in residence in the immediate neighborhood of asbestos plants. There appear to be different levels of risk in different types of occupational exposures, and some of these may be reflected in corresponding household and neighborhood experience.

Another source of evidence of the relative risks associated with inhaling moderate or small numbers of asbestos fibers is the experience of persons who have had occupational exposures below those known to be definitely hazardous. The maximal airborne fiber concentrations recommended for prevention of asbestosis are much higher than any likely to be encountered in nonoccupational situations. Occupation-related asbestosis can be effectively controlled with airborne fiber concentrations much higher than are likely to be encountered in non-occupational situations. It is important to determine whether workers whose exposures have been reduced to levels that prevent or greatly delay asbestosis, as well as others whose exposures are indirect, have a lower risk of lung cancer than those with higher and more direct exposures.

Most series of case reports of mesothelioma include some persons who have worked in the construction or shipbuilding industries, but in trades not involving direct contact with asbestos. Such persons as plumbers, electricians, and metal workers often have more ferruginous bodies in their lungs than do white-collar workers. A study of occupational groups in California revealed an excess of deaths from lung cancer in insulation workers, but found no excess lung-cancer deaths in other construction trades. There may be a definable gradient of effect within the construction trades. More thorough studies of groups with indirect exposures are certainly needed.

The mortality experience of those who are directly and indirectly exposed to asbestos in their employment is not directly applicable to the general public who have had moderate or slight exposures from ambient air. The evidence suggests a gradient of effect from direct occupational, to indirect occupational, to family and neighborhood situations, in all of which dust concentrations are probably high by comparison with most community air. This suggests that there may be levels of asbestos exposure that will not be associated with any detectable risk. What those levels are is not known. However, if we eliminate the known occupational, household and neighborhood exposures, we drastically decrease the potential for this risk. For this reason our regulations must be directed to emission sources and limitations imposed at the origin as distinguished from an effort to establish air quality standards as we have done with regard to other air pollutants of demonstrated adverse health effects.

Having considered the health impact inherent in asbestos emissions, we now examine the available measurement and abatement procedures.

Sampling of asbestos fiber seeks to obtain a representative sample of the total air mass in sufficient quantity to make quantitative assessments statistically significant. Methods employed in asbestos sampling and the possible sources of error are discussed at length in Ex. 20, Harwood, p. 42 and following.

Of the several techniques available for emission sampling, the membrane filter recommended by the U. S. Public Health Service, has become the standard technique for environmental asbestos emission sampling.

Air is drawn through a cellulose membrane filter where the particles are entrained. Although the effective pore size of the filter (0.45 microns to 0.8 microns) is larger than the diameter of many of the asbestos fibers, the surface charge properties of the filter and the asbestos fibers, plus the circuitous path through the filter, result in collection of virtually all of the particles and fibers to which the filter is exposed.

The collected fibers must be analyzed. This may be accomplished by using a microscopic, photographic or electronic technique to count the fibers resulting from a known volume of air. The fibers which are counted are seen at a given magnification and the number will vary.

The standard practice in industrial hygiene is to use a phase contrast microscope at a magnification of X430. The fibers counted are those having a length of greater than 5 microns with the ratio of length to breadth at least 3:1.

The use of an electron microscope would allow all the particles to be counted, However, the expense, time and expertise neces-

sary to count all the particles makes this procedure impractical.

In understanding control techniques and their efficiencies, it is important not to confuse efficiencies quoted on a weight basis with those based on a particle count.

Considering efficiency based on a weight basis, it is relatively easy to get a very high efficiency with particles whose size is in excess of 5 microns with a variety of control devices. However, the efficiency does drop off considerably with decrease of particle size.

Dr. Harwood, in his study, considers what a collection efficiency as high as 99.999% (the percentage of the total weight of the particulate matter which will be collected by the filter) actually means in terms of the number of fibers collected. (Ex. 20, p. 47). He concludes that 10⁷ fibers actually will pass through the collecting filter for every 1 gram of material impinging upon it.

This is a situation not frequently brought out, but is very significant when exposure levels are monitored in terms of fibers per cubic centimeter. Thus, quoting of efficiency in terms of mass efficiency is a statement that tends to be deceptive. It bears no obvious relation to the number of fibers being emitted.

However, based on tests which actually measure the number of fibers being emitted, it would seem that both fabric filters and high efficiency wet scrubbers are capable of reducing the fiber counts to acceptable levels. British experience is that 0.2 f/cc is routine and Johns Manville finds that 1 f/cc is an acceptable value when the results are averaged over a time period.

We adopt the two fibers per cubic centimeter and the over five micron standards because of the facility of both abatement and measurement utilizing these numbers and because they furnish a sound indication of asbestos content in the air. However, recognition that particles of smaller size may have adverse health consequences of equal or greater magnitude will require the Board to review this subject periodically in consideration of the available measurement technology. See Ex. 6, Lynch, Ayer and Johnson, "The Interrelationships of Selected Asbestos Exposure Indices," American Industrial Hygiene Association Journal, September-October, 1970, p. 598. (The direct index of asbestos fiber exposure proved to be the concentration of fibers longer than 5 microns. See Ex. 27, Edwards and Lynch, "The Method Used by the U. S. Public Health Service for Enumeration of Asbestos Dust on Membrane Filters," U. S. Department of HEW.

Consideration must be given to available control techniques, the fabrication and use of asbestos containing products and exposure resulting from activities involving asbestos emission potential.

Because of the demonstrated alternatives to asbestos spraying, our regulations will flatly outlaw this activity. Spraying of non-asbestos materials are permitted subject to stringent protective measures.

Air ventilation systems can be employed to minimize emission during the mixing of fibrous fireproofing and insulation materials. Hoods can be provided at bag-opening and emptying areas. The mixing area, if not totally enclosed, should be ventilated. Conveying equipment, to and from the mixer, can be enclosed. Bagging of the mixed material should be done under suction hoods.

On-site controls needed include enclosing the area to be sprayed and employing good housekeeping procedures both before and following the spray operation. The filling of the spray machine hopper must be done carefully to minimize dust. When the machine is not in use, the hopper should be covered to prevent the material from being blown about.

Several states and manufacturing associations have published guidelines for emission control. The recommendations include the following:

1. All areas used for opening bags containing fibrous insulating materials and charging of hoppers should be enclosed. Empty bags should be properly disposed of.
2. Floor areas should be swept broom clean before spraying operations begin. All unnecessary objects in the spray area should be removed or covered with plastic or plastic coated tarpaulins.
3. The entire area to be sprayed should be enclosed with plastic or plastic coated tarpaulins. An enclosure will be considered satisfactory only if visible insulating material cannot escape from the closure.
4. Fibrous-containing material that falls to the floor should be swept up immediately and placed in approved disposable containers.
5. When spraying is completed in an area, the entire work area and the materials used to form the enclosure should be thoroughly vacuumed. The vacuum cleaner should contain a strong, single-service, disposal inner bag which shall be removed from the vacuum cleaner and sealed. Disposal is the same as for other bagged waste materials.

6. Any plenum or other structure coated with asbestos-containing insulation and intended for circulation of air in the building must be thoroughly cleaned of debris and waste. Fibrous insulation in a duct or plenum must be coated with a sealer to preclude erosion of the insulation by circulating air.

Our regulations embody the essential features of these suggestions.

Asbestos emissions are likely in any process in which asbestos fiber is handled or asbestos-containing materials are cut, drilled, or trimmed. The quantity of asbestos dust generated by these operations can be quite large. Since it is impractical to completely seal a factory or a work area, industry has adopted an arrest-at-the-source technique for capturing this dust utilizing a complex ventilation system comprised of capture hoods, ductwork, fans and filters. Benefits received from this system include:

1. Reduced atmospheric emission when plant is open to ambient conditions (i.e., doors and windows open).
2. Reduced external emission from fibers being carried outside on work clothing and manufactured products.
3. Greater efficiency in plant operation because of reduced internal housekeeping chores (vacuuming, etc.).
4. Better personnel attitudes. The ventilation system may eliminate the need for personal respirator units which limit efficiency and are generally disliked by workers.

The air ventilation system is an integral part of the emission control program and the components of various systems in operation will be considered.

Two types of ventilation systems are employed for dust emission control; low volume, high velocity; and high volume, low velocity. Each requires a specific type of hood design.

The low volume, high velocity systems induce an extremely high captive air velocity, 10,000 to 12,000 ft/min., at the dust source. The air volume, however, averages only 10-250 cfm. With this system it is essential that the feed particles be carried by the air stream. The entrainment force must exceed the gravitational or projectional force.

Low velocity, high volume air ventilation systems, on the other hand, are utilized for operations where localized capture is

not possible. For such hoods to be effective, the air velocity to the ducted area must be at least 150 ft/min and should be such that the air flow direction is always toward the collection system.

A considerable amount of ductwork is required for a large plant having a central collection point. Circular ducts, having no sharp bends, are recommended. Inspection ports should be provided near bends.

Several types of collectors have been utilized by the asbestos industry for dust control. Baghouses represent the most frequently used filtering system. Wet scrubbers are also used. Cyclone precipitators may be used as primary collectors preceding baghouse filters.

Electrostatic precipitators tried by the asbestos industry have several deficiencies. Asbestos is an insulator and builds upon the electrodes reducing efficiency. Installation costs are higher than for baghouses. An electrical failure would remove all emission control.

The most commonly used filter system is the fabric filter. This device is found in a wide variety of forms from highly sophisticated systems containing thousands of bags to crude devices containing homemade burlap bags. The baghouse is compartmentalized to allow continuous operation by alternately cutting off sections for cleaning while other sections continue their dust removal function. The bags are "cleaned" by a mechanical shaking action, either by a shaking floor or, more commonly, by a shaking support. More elaborate cleaning systems such as reverse cycle air jets or sonic systems have not been considered worth the extra complication.

The baghouse unit is frequently located outside the factory building to conserve space. Usually the filtered air is exhausted to the atmosphere. In some cases it is returned to the factory to conserve heat. This air contains some asbestos fibers since no control technique is considered to be 100% efficient. Waste products collected in the baghouse hopper are removed by helical screw conveyor. Design of the hopper emptying mechanism should provide as foolproof an operation as possible. Severe pollution can arise if the mechanism is opened for repair.

Other collection devices used either in combination with fabric filters or alone are various types of cyclone separators.

Low efficiency cyclones are used in the asbestos industry as first stage separators preceding fabric filters. They are useful when the waste product is reusable and there is a considerable quantity present. Thus, the load on the fabric filter is relieved.

Further, the removal of heavy abrasive waste material will prolong the life of the filter bag.

High efficiency cyclones are generally employed in multiple units. They are used where high efficiency is required and where no use is made of backup fabric filters.

Wet cyclones are employed as emission control devices in some special instances where wet processes are used for production of asbestos products. Although generally not as efficient as bag filters, they eliminate the problem of filter blockage caused by condensation.

The fans which provide the air movement through the dust collection system may be mounted either upstream or downstream of the filter system, the most common arrangement being downstream. This places the ventilation system under a negative pressure assuring that ambient air will be drawn into the system in case of leaks, rather than dust and fibers being exhausted to the atmosphere.

All asbestos product manufacturers are faced with the problems of storage and transportation of bagged asbestos fibers. Emission controls for these operations depends to a great extent upon the conscientiousness of the individual user.

Manufacturers should provide clearly defined, clean, dry storage space for the bags where they are protected from accidental damage. A rotation system should be employed to ensure that older bags are used first. Damaged bags should be placed in larger slipover bags and resealed. Small tears in bags should be patched with tape.

Jute bags are permeable and will allow fiber emission. Kraft paper bags are liable to tearing when handled roughly. The best compromise at this time seems to be bags of coated, woven polyolefin.

Bag storage and the bag opening areas should be as close as practical. Fork-lift trucks are usually employed to transport the bags between these areas. The route used by the trucks should be smooth surfaced and free of obstructions which might cause damage to the bags.

The bags should be opened in a hooded area using a sharp knife to slit the bag. Pressure packed fibers will hold together as a unit and can be slipped into an enclosed conveying system where they are transported to a fiber opener (willow or fluffer). All conveyor systems transporting asbestos fibers or mixtures of asbestos and other materials must be completely enclosed.

The emptied bags also present an emission source. Care must be taken to dispose of them. Since there are few manufacturing processes which will accept paper bags as part of the process, asbestos paper being an exception, they are usually bundled into large polyethylene bags and taken to dumps for disposal. Plastic shipping bags can be similarly utilized in some manufacturing processes as the floor tile industry, for example.

A possible source of emission from manufacturing processes is the transport of fibers outside by the workers themselves. The control of this source of emission to date has not been very satisfactory. At best, booths are provided where workers may clean fibers from their clothing. The booths are equipped with extraction fans in the ceiling and a flexible pressure hose. Suction hoses would be preferable. Separate lockers for work and street clothing is suggested. See Ex. 9, Cralley, "Identification and Control of Asbestos Exposures", American Industrial Hygiene Association Journal, February, 1971, p. 82. Ex. 18, "Recommendations for Handling Asbestos", Engineering Equipment User Assn., No. 33, Rev. 1971. Ex. 13, "Recommended Health Safety Practices", National Insulation Manufacturers Association, Inc.

Demolition and waste disposal are likely to be emission sources if appreciable amounts of asbestos are used in construction, unless operational procedures are strictly controlled. Isolation, enclosure, and wetting down are useful. Caution must be observed not to demolish during high winds and to keep sludge from drying out and becoming airborne later through natural forces and from being introduced into sources of drinking water.

The subject of disposal of asbestos waste must be examined. Recycling is possible if a plant has a filter-ventilation system. But the effectiveness of recycling varies with the kind of processing. If a product such as water pipes is made in which asbestos is mixed with cement, a chemical reaction occurs making re-use of much waste impractical or impossible. If asbestos paper is produced, much airborne fiber can be collected and re-used. However, virtually all manufacturing of asbestos products can involve some recycling.

The dust collected in the filters, the "short fibers", can be re-used in the manufacturing of transite pipe. This pipe contains mostly long fibers used for their strength and thus, only a limited amount of the "shorts" can be mixed in. Recycling is especially feasible for large companies which manufacture transite pipe as well as other asbestos products. In this case, recycling is profitable as it involves only cleaning the filters and transporting the "shorts" in the area of the plant or to the division of the company which manufactures transite. Recycling does not appear to be relied upon as much in plants which do not produce transite. In such case, the company

would have to sell its short fibers. We do not know how great the demand is. Nor do we know the percentage of collected fibers which can be recycled under optimal economic conditions. Johns-Manville in Waukegan claims to re-use "most" of the filtered short fibers. But it manufactures transite, brake linings, sheet packing and gaskets, which facilitates and makes cheaper the use of captured fibers in transite production.

Generally, the asbestos collected through the filters or swept up is disposed into plastic bags. A special disposal procedure is followed by some manufacturers of asbestos paper products. Water is used in the production, which picks up asbestos fibers and is then drained off into settling ponds. The heavy material settles out and the water is then channeled back to the plant for re-use. The sludge is at the bottom of the pond and is shovelled up and dumped. The material is not buried.

We do not know if any factory directly or eventually discharges this water into natural water flows or sewage systems, which could pose a considerable hazard. The Johns-Manville Waukegan plant uses a pond system, but the water is recycled.

While our regulations are enacted in the context of other governmental controls of asbestos, they necessarily go beyond these regulations to deal with significant emission sources not covered elsewhere.

The Federal Environmental Protection Agency proposed asbestos standards on December 7, 1971, under its authority to regulate hazardous air pollutants (40 CFR, Part 6). All emission sources which exist in Illinois and which are proposed for coverage by the Federal Environmental Protection Agency are covered by today's regulation. Also, our regulation covers waste disposal and water pollution; imposes procedural safeguards for construction and demolition; and sets a numerical emission standard in addition to a "no visible emission" standard for manufacturing emissions beyond the plant.

~~The Illinois Department of Labor adopted the recommended safety standard of the American Conference of Governmental-Industrial Hygienists for "in-plant" air. The regulation we adopt today does not control the levels of asbestos inside a plant, largely an occupational hazard beyond our jurisdiction. Insofar as this Board's regulation affects what transpires inside a plant or on a construction site, the impact is merely incidental to the relationship between certain "in-plant" activity and a significant hazard of air pollution beyond the site of such activity.~~

For example, Sec. 201(c) requires that facilities be provided at the work site to prevent the removal of visible amounts of asbestos from the site on the clothing of employees. The evidence shows that human transport of asbestos fiber is a health hazard to those coming into contact with asbestos workers beyond the confines of the job.

The Illinois Department of Labor also adopted procedures for enclosure and cleaning of construction sites, on which asbestos is sprayed. These procedures were intended to protect the health of workers on the site, although their effect, if pursued, would be to reduce emissions to the ambient air. The record shows that such procedures are cumbersome, seldom obeyed to the letter, difficult to enforce and insufficient when obeyed to protect the public beyond a construction site. Hence, we have banned asbestos spraying. Again, the impact which this Board's decision exerts on the actions of another state agency is made necessary by our mandate to protect all members of the public from air pollution.

A similar ban on spray asbestos has already been taken by the Cities of Chicago (effective January 1, 1972), and New York, and is being considered by several other cities.

In consideration of the foregoing factors, the Board submits a comprehensive regulation for asbestos controls. To this end, the regulations identify the significant contributors of asbestos as the commercial use of asbestos in construction work; the demolition of asbestos-containing structures; the manufacturing and processing of asbestos-containing products; the transportation of certain asbestos-containing products; and the disposal of asbestos-containing waste. The use of asbestos in brakes, while originally included as a subject of control, will be deferred for the time being.

Part II of the regulations imposes several general requirements upon all commercial construction, repair, alteration, demolition, manufacturing or processing activity from which asbestos fiber is discharged into the ambient air. The persons responsible for manufacturing activity must obtain a permit from the Environmental Protection Agency. The permit system will serve to produce the advanced assurance of compliance with the applicable control regulations and will thus reduce the cost and burden of in-the-field enforcement.

In addition, these commercial activities must provide facilities to prevent the removal of asbestos fibers from the site of such activity on the clothing of employees. Indeed, this poses a rather new concept of air pollution control. Those who have died from lung ailments induced by long, close association to an asbestos worker may be powerful proof of the need for novelty.

Finally, the Regulation would provide for careful waste disposal procedures, as wind-blown refuse heaps and scrap piles contribute to the volume of asbestos fiber in our air. The simple steps for control eliminate any excuse for such dangerously sloppy housework.

In our final draft, the permit requirement of Part II has been restricted to manufacturing emission sources. This is in accord with the Agency testimony that presently it has inadequate staff to handle the permit load created by a blanket requirement. All manufacturers of asbestos products must obtain a permit by June 30, 1972.

- Part III prohibits the spraying of asbestos-containing insulation and fireproofing. Experience has indicated that procedural safeguards are inadequate and their enforcement is an overtaxing burden.

Procedural safeguards designed to reduce fiber emissions would be required to spray non-asbestos insulation. The biological effects of these fibers is unknown. Prudence would seem to dictate reasonable efforts to soften the potential future blow from spray fiber aspiring to asbestos' status.

Part III requires that various asbestos-related activities at construction sites be done within an enclosure. It would also require that asbestos construction products be so installed as to preclude the emission of fiber into the circulating air.

In the interest of efficient enforcement the numerous restrictions on the spraying of non-asbestos fibrous material have been reduced to requirements for enclosure and for vacuuming. Also this section has been changed to make clear that these safeguards are required only when spraying of non-asbestos materials occurs in an area open to the atmosphere. This "open to the atmosphere" modification has also been added to the section controlling the cutting, trimming, fitting or stripping of asbestos-containing materials at a construction site. Part III now contains a "no visible emission" standard which must be met regardless of adherence to the required procedural safeguards. This should permit easier enforcement and tend to insure greater compliance with the safeguards.

The original proposal contained two regulations controlling the general application of asbestos-containing materials and the application of non-asbestos materials in air ducts or plenums. This has been altered to require that only asbestos-containing materials, used in any construction work, be so installed as to preclude emission of the fiber to the circulating air. There is little medical data available to prove or disprove the toxic effects of the multitude of non-fibrous construction material, although one such product, fiberglass, would appear to be biologically inert. The Board prefers to act on the safe side of health in regard to spraying operations, which can emit large quantities of fiber if uncontrolled. In any event, such uncontrolled emissions constitute a nuisance dust and could be controlled on that basis alone. These reasons do not apply with equal force to the non-spray application of non-asbestos materials in construction.

Part IV expresses, ironically, what may be a key reason for banning spray asbestos. It would require that procedural safeguards be pursued in order to demolish a structure whose destruction would otherwise expose members of the public to asbestos fiber. Clouds of dust are often raised by demolition work. The fact that great numbers of persons may be exposed to this dust in urban areas and that the post-war generation of high-rises were the first buildings to use asbestos insulation extensively speak in favor of such regulation.

Part IV is intended to require an enclosure only when necessary to prevent dispersion of dust during demolition and only an enclosure which is reasonably compatible with the structure to be demolished. In some cases, total enclosure can be feasibly achieved. With other structures, a ground level enclosure may be the limit of compatibility.

Part V, controlling manufacturing sources, is changed to require an emission standard of two fibers per cubic centimeter and no visible emissions. While some testimony indicated the difficulty in measuring compliance with a numerical emission standard, overall, the evidence establishes both the need (protection against the great proportion of invisible fiber) and the ease of measurement of such a criterion. A "no visible emission" standard has been added to the numerical standard to simplify enforcement against exceptionally dirty emission sources. A grace period, until June 30, 1972, has been added to permit acquisition of the necessary control equipment to attain the emission standard.

References are made to the method to be used in collecting and counting emission samples. The sampling method is that generally used in sampling particulate emissions. The counting method is that reliably used by the U. S. Public Health Service.

A requirement has been added, at the Environmental Protection Agency's suggestion, to channel all asbestos emissions inside the plant through control equipment and to exhaust such emissions through points where samples can be taken. This is intended to prevent venting through windows or doors or other avenues of escape on which sampling cannot be adequately performed. The Agency is also given the power to inspect manufacturing premises at reasonable times to determine compliance. Also, the manufacturer must engage in monitoring and reporting. The latter two additions are in keeping with the Board's practice in most areas of regulation.

The waste water discharge provision now requires no discharge of process water to which the manufacturer has added asbestos unless best available treatment technology is first utilized.

A "no visible emission" standard has been added to the transportation regulation.

The emission standard would measure only fibers longer than five microns. The justification for this seems to be the administrative convenience of avoiding difficulties in measuring fibers from .5 to five microns in length. Some medical evidence has indicated that the very small fibers may be the most dangerous. The Board will continue to examine the medical implications of the sub-five micron fibers and the means of measurement and control.

Part V, Sec. 501(a) - has been slightly changed from the proposed final draft to add the phrase "into the ambient air" in order to make clear that the emission standard does not apply to the in-plant atmosphere.

In Part V, Sec. 502 - the word "enclose" has been changed to "control" on the suggestion that as previously written the meaning was unclear and implied total enclosure of all facilities.

Our original proposal would have prohibited the use of brake lining in vehicles manufactured after January 1, 1975 and sold for use in Illinois. It was believed if brake lining decomposition emits asbestos fiber, then the tremendous number of vehicles using asbestos, and the impracticability of controlling these numerous small emission sources would appear to speak to the need for a product ban.

This proposal to ban asbestos brake lining has been dropped for the time being. While the evidence shows that brake lining decomposition is a significant source of background levels of asbestos, these ambient air levels are quite small and have not been shown to be a health hazard (although they have not been shown not to be). In addition, adequate alternatives to asbestos-lined brakes are not yet available, although closed braking systems, preventing the emission of asbestos dust, are possible. The Board will follow the medical and engineering aspects of this problem and possibly may return to it.

Finally, local governments are obliged to enforce these regulations, except for the manufacturing provisions. Much of the problem arises from numerous construction activities, and the Agency cannot adequately supervise these many emission sources. The "no visible emission" standard has been added especially to facilitate local government and citizen assistance in enforcement.

I, Christian Moffett, Clerk of the Illinois Pollution Control Board, certify that the above Opinion was adopted on the 6th day of January, 1972 by a vote of 4-0.

Christian Moffett