ILLINOIS POLLUTION CONTROL BOARD May 27, 1982

IN THE MATTER OF:) RACT II RULES,) CHAPTER 2: AIR POLLUTION)

Proposed Rule. First Notice.

ORDER OF THE BOARD (by I. Goodman):

It is the Order of the Illinois Pollution Control Board that the following proposal to amend Chapter 2: Air Pollution Regulations be adopted for First Notice publication in the Illinois Register pursuant to Section 5.01(a) of the Illinois Administrative Procedure Act.

I. VOLATILE ORGANIC MATERIAL

1. The definition of Volatile Organic Material in Rule 201 shall be amended to read as follows:

Volatile Organic Material: Any organic material which has a vapor pressure of 17.24kPa (2.5 psi) or greater at 294.3k (70°F). For purposes of Rule 205(1)(1-3), Volatile Organic Material means any organic material which has a vapor pressure of 1.5 pounds per square inch absolute (psia)(78 millimeters of mercury) or greater at 70°F. For purposes of Rule 205(k), 205(1)(4), 205(n), 205(s), 205(t), 205(u), and 205(v), volatile organic material means any organic material which has a vapor pressure greater than 0.13kPa (.0019 psi) at 294.3k (70°F). For purposes of this definition, the following are not volatile organic material: 1. Methane, 2. Ethane, 3. 1,1,1-Trichloroethane, 4. Methylene Chloride.

II. Rotogravure and Flexography

1. Rule 201 shall be amended to include the following new definitions concerning printing:

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. 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.

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.

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.

2. Rule 205 shall be amended by adding a new section(s) as follows:

- (s) Flexographic and Rotogravure Printing
- (1) 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 the facility unless:
 - (A) The volatile fraction of ink as it is applied to the substrate contains 25 or less percent 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:
 - (i) A carbon adsorption system which reduces the volatile organic emissions from the capture system by at least 90 percent by weight; or
 - (ii) 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
 - (iii) An alternative volatile organic material emission reduction system demonstrated to have at least a 90 percent overall reduction efficiency and approved by the Agency.

- (D) A capture system must be used in conjunction with any of the emission control systems in Rule 205(s) (1)(C)(i)-(iii). 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:
 - (aa) 75 percent where a publication rotogravure process is employed; or
 - (bb) 65 percent where a packaging rotogravure process is employed; or
 - (cc) 60 percent where a flexographic printing process is employed.

(2) Exemptions

The limitations of Rule 205(s) shall not apply to any printing press whose total uncontrolled 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.

(3) Applicability of Rule 205(f)

Upon achieving compliance with Rule 205(s), the emission source is not required to meet Rule 205(f). Emission sources exempted from Rule 205(s) are subject to Rule 205(f). Rotogravure or flexographic equipment used for both roll printing and paper coating are subject to 205(s).

- (4) Testing and Monitoring
 - (A) Upon a reasonable request of the Agency, the owner or operator of a volatile organic material source subject to 205(s) 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 emisions test to demonstrate compliance with Rule 205(s) 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.

III. LEAKS FROM PETROLEUM REFINERY EQUIPMENT

1. Rule 201 shall be amended to include the following new definitions concerning leaks from petroleum refinery equipment:

<u>Component</u>: Any piece of petroleum refinery equipment which has the potential to leak volatile organic material including, but not limited to, pumping 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.

Valves Not Externally Regulated: Valves that have no external controls, such as in-line check valves.

Liquid Service: Equipment which processes, transfers or contains a volatile organic material or mixture of volatile organic materials in a liquid phase.

<u>Heavy Liquid</u>: Liquid with a true vapor pressure of less than 0.3 KPa (0.04 psi) at 294.3K (70°F) or 0.1 Reid Vapor Pressure as determined by ASTM method D-323; and which when distilled requires a temperature of 300° F or greater to recover 10% of the liquid as determined by ASTM method D-85.

<u>Gas Service</u>: Equipment which processes, transfers, or contains a volatile organic material or mixture of volatile organic materials in a gaseous phase.

<u>Refinery Unit, Process Unit or Unit</u>: A set of components which are a part of a basic process operation such as distillation, hydrotreating, cracking or reforming of hydrocarbons.

2. Rule 205(1) shall be amended by adding new subsections (4)-(10) as follows:

(4) Petroleum Refinery Leaks: General Requirements

The owner or operator of a petroleum refinery shall:

- (A) Develop a monitoring program plan consistent with the provisions of Rule 205(1)(5);
- (B) Conduct a monitoring program consistent with the provisions of Rule 205(1)(6);
- (C) Record all leaking components which have a volatile organic material concentration exceeding 10,000 ppm consistent with the provisions of Rule 205(1)(7);
- (D) Mark each component consistent with the monitoring program plan submitted pursuant to Rule 205(1)(5);

4

- (E) Repair and retest the leaking components as soon as possible but no later than 22 days after the leak is found 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 Rule 205(1)(8).
- (5) Monitoring Program Plan for Refinery Leaks

The owner or operator of a petroleum refinery shall prepare a monitoring program plan which contains, at a minimum:

- (A) A list of all refinery components and the period in which each will be monitored pursuant to Rule 205(1)(6);
- (B) The format for the monitoring log required by Rule 205(1)(7);
- (C) A description of the monitoring equipment to be used pursuant to Rule 205(1)(6); and
- (D) A description of the methods to be used to mark all pipeline valves and pressure relief valves in gaseous service and to mark all leaking components such that they are obvious to both refinery personnel performing monitoring and Agency personnel performing inspections.
- (6) Monitoring Program for Refinery Leaks
 - (A) The owner or operator of a petroleum refinery subject to Rule 205(1)(4) shall, for the purpose of detecting leaks, conduct a component monitoring program consistent with the following provisions:
 - (i) Test all pump seals, pipeline valves, process drains, compressor seals, and pressure relief valves in gaseous service by methods and procedures approved by the Agency prior to May 1st of each year;
 - (ii) Test all compressor seals, pipeline valves in gaseous service, and pressure relief valves in gaseous service by methods and procedures approved by the Agency prior to August 1st of each year;
 - (iii) Observe visually all pump seals weekly;
 - (iv) Test immediately any pump seal from which liquids are observed dripping;

- (v) Test any relief valve within 24 hours after it has vented to the atmosphere; and
- (vi) 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 Rule 205(1)(5)(A).
- (C) The Agency may require more frequent monitoring than would otherwise be required by Rule 205(1)(A) for components which are demonstrated to have a history of leaking.
- (7) Recordkeeping for Refinery 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:
 - (i) The name of the process unit where the component is located;
 - (ii) The type of component (e.g., valve, seal);
 - (iii) The identification number of the component;
 - (iv) The date on which a leaking component is discovered;
 - (v) The date on which a leaking component is repaired;
 - (vi) The date and instrument reading of the recheck procedure after a leaking component is repaired;
 - (vii) A record of the calibration of the monitoring instrument;
 - (viii) The identification number of leaking components which cannot be repaired until turnaround; and
 - (ix) 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.

(8) Reporting for Refinery Leaks

The owner or operator of a petroleum refinery shall:

- (A) Submit a report to the Agency prior to the 1st day of May and August listing all leaking components identified pursuant to Rule 205(1)(6) 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 Rules 205(1)(4).
- (9) Alternative Program For Refinery Leaks

The Agency may approve an alternative program of monitoring, recordkeeping, and/or reporting to that prescribed in Rule 205(1)(5-8), 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 Rule 205(1)(5).

(10) Sealing Device Requirement

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.

2. Rule 205(m) shall be amended by adding a new subsection (4) as follows:

(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) within 6 months after the effective date of this regulation.
- (B) Submit the first monitoring report pursuant to Rule 205(1)(6)(A)(i) to the Agency prior to May 1, 1982.

7

IV. SURFACE COATING OF MISCELLANEOUS METAL PARTS AND PRODUCTS.

1. Rule 201 shall be amended to include the following new or revised definitions concerning surface coating:

<u>Air Dried Coating</u>: Coatings that dry by the use of air or forced air at temperatures up to 363.15k (194°F).

<u>Clear Coating</u>: Coatings that lack color and opacity or are transparent using the undercoat as a reflectant base or undertone color.

Extreme Performance Coating: Coatings designed for exposure to any of the following: the ambient weather conditions, temperatures above 368.15k (203°F), detergents, abrasive and scouring agents, solvents, corrosive atmospheres, or other similar extreme environmental conditions.

Diesel-Electric Locomotive Products: For the purposes of Rule 205(n)(1)(L), diesel-electric locomotive products shall include diesel-electric locomotive, component sets, and associated power-generating equipment.

Heavy Off-Highway Vehicle Products: For the purposes of Rule 205(n)(1)(K), heavy off-highway vehicle products shall include heavy construction, mining, or material handling equipment, heavy industrial engines, and the components of such equipment or engines.

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.

<u>Miscellaneous Metal Parts and Products</u>: For the purposes of Rule 205(n)(1)(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 Rules 205(n)(1)(A)-(I), the exterior of airplanes, automobile or light duty truck refinishing, the exterior of marine vessels including marine propulsion equipment, and the customized top coating of automobiles and trucks if production is less than thirty-five vehicles per day.

<u>Transfer Efficiency</u>: 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. 9

The Agency proposes that Rule 205(n)(1) be amended by

2.

adding new subsections (J), (K) and (L) to provide as follows:		
(J) Misc	ellaneous Metal Parts and Prod	ucts Coating ⁷
(i)	clear coating	0.52 (4.3)
(ii)	air dried coating	0.42 (3.5)
(iii)	extreme performance coating	0.42 (3.5)
(iv)	all other coatings	0.36 (3.0)
(K) Heavy Off-highway Vehicle Manufacturing Plant		
(i)	Extreme performance prime coat	0.42 (3.5)
(ii)	Extreme performance top coat-air dried	0.52 (4.3)
(iii)	Final repair coat-air dried	0.58 (4.8)
(L) Diesel-electric Locomotive Manufacturing Plant		
(i)	Extreme performance prime coat	0.42 (3.5)
(ii)	Extreme performance top coat-air dried	0.52 (4.3)
(iii)	Final repair coat-air dried	0.58 (4.8)

3. Rule 205(n)(2) shall be amended by adding a new subsection (C) to provide as follows:

(C) Methods or procedures used to determine emissions of organic material shall be approved by the Agency.

V. EXTERNAL FLOATING ROOF TANKS

1. Rule 201 shall be amended to include the following new definitions concerning petroleum liquid storage tanks:

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.

⁷ The least restrictive limitation shall apply if more than one limitation pertains to a specific coating.

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.

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.

Waxy, Heavy Pour Crude Oil:

- (1) A crude oil with a pour point of 50 degrees Fahrenheit or higher as determined by the American Society for Testing and Materials Standard D97-66, "Test for Pour Point of Petroleum Oils;" or
- (2) A paraffinic crude oil containing more than 2.5 percent n-paraffin content as determined by a method prescribed by the Agency; or
- (3) An asphaltic crude oil with viscosity exceeding 500 SUS at 20 degrees Fahrenheit.
- 2. Rule 205(a)(2)(A) shall be revised to read as follows:
- (A) A floating roof which rests on the surface of the volatile organic material and is equipped with a closure seal or seals between the roof edge and the tank wall. Such a floating roof shall not be permitted if the volatile organic material has a vapor pressure of 86.19 kPa (12.5 psia) or greater at 294.3K (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.
- 3. Rule 205(a)(2)(C) shall be revised to read as follows:
- (C) Other equipment or means of equal efficiency approved by the Agency according to the provisions of Part 1 of this Chapter 2.
- 4. Rule 205(a)(3) shall be deleted.
- 5. Rule 205(0)(3) shall be revised to read as follows:
- (A) The requirement of Rule 205(0)(3)(B) shall not apply to any stationary storage tank:
 - (i) Equipped before January 1, 1979 with one of the vapor loss control devices specified in Rule 205(a)(2) except Rule 205(a)(2)(A);

- (iii) With a capacity of less than 1,600 m³ (422,400 gallons) and used to store produced crude oil and condensate prior to custody transfer;
 - (iv) With a capacity of less than 1,430 m³ (378,000 gallons) and used to store produced oil or condensate in crude oil gathering;
 - (v) Subject to new source performance standards for storage vessels of petroleum liquid (Rule 909 of Chapter 2);
 - (vi) In which volatile petroleum liquid is not stored; or
- (vii) Which is a pressure tank as described in Rule 205(a)(1).

6. Rule 205(0)(3) shall be amended by adding new subsections (C) and (D) as follows:

- (C) In addition to meeting the requirements of Rule 205(0)(3)(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:
 - (i) 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;
 - (ii) Each seal closure device meets the following requirements:
 - (aa) The seal is intact and uniformly in place around the circumference of the floating roof between the floating roof and tank wall; and
 - (bb) The accumulated area of gaps exceeding 0.32 cm (1/8 inch) in width between the secondary seal₂ and the tank wall shall not exceed 21.2 cm² per meter of tank diameter (1.0 in² per foot of tank diameter), as determined by methods or procedures approved by the Agency;

- (iii) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers across at least 90 percent of the area of the opening;
- (iv) Openings are equipped with projections into the tank which remain below the liquid surface at all times;
 - (v) Inspections are conducted prior to May 1st of each year to insure compliance with Rule 205(o)(3)(C);
- (vi) The secondary seal gap is measured prior to May 1st of each year in accordance with methods or procedures approved by the Agency;
- (vii) 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;
- (viii) Upon a reasonable request by the Agency, the owner or operator of a volatile organic material source required to comply with Rule 205(o)(3)(C), at his own expense, demonstrates compliance by methods or procedures approved by the Agency; and
 - (ix) A person planning to conduct a volatile organic material emission test to demonstrate compliance with Rule 205(0)(3) 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.
- (D) The requirements of Rule 205(o)(3)(C) shall not apply to any stationary storage tank equipped with an external floating roof:
 - (i) Exempted under Rule 205(o)(3)(A)(ii)-(vi);
 - (ii) Of welded construction equipped with a metallictype shoe seal having a secondary seal from the top of the shoe seal to the tank wall (shoemounted secondary seal);
 - (iii) Of welded construction equipped with a metallictype 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 294.3K (70°F) is stored; or

(iv) Used to store waxy, heavy pour crude oil.

VII. PERCHLOROETHYLENE DRY CLEANING

1. Rule 201 shall be amended to include the following new definition:

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.

2. Rule 103(i) shall be amended by adding a new subsection (23) as follows:

> (23) coin-operated dry cleaning operations; and (24) dry cleaning facilities consuming less than 30 gallons per month (360 gallons per year) of perchloroethylene.

3. Rule 205 shall be amended by adding a new section (u) as follows:

- (u) Dry Cleaning
- (1) 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.
- (2) The provisions of Rules 205(u)(1)(A), (B) and (C) 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.
- (3) Testing and Monitoring
 - (A) Compliance with Rule 205(u)(1)(A), (C) and (G) shall be determined by a visual inspection;
 - (B) Compliance with Rule 205(u)(1)(D) shall be determined by a visual inspection of the following: hose connections, unions, couplings, and valves; machine door gaskets and seatings; 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 Rule 205(u)(1)(B), (E) and (F) shall be determined by methods or procedures approved by the Agency.

VIII. MANUFACTURE OF PNEUMATIC RUBBER TIRES

1. Rule 201 shall be amended to include the following new definitions concerning pneumatic rubber tire manufacturing:

<u>Pneumatic Rubber Tire Manufacture</u>: 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.

<u>Undertread Cementing</u>: The application of a solvent-based cement to the underside of a tire tread.

Bead Dipping: The dipping of an assembled tire bead into a solvent-based cement.

<u>Tread End Cementing</u>: The application of a solvent-based cement to the tire tread ends.

<u>Green Tires</u>: Assembled tires before molding and curing have occurred.

<u>Green Tire Spraying</u>: 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.

<u>Water-Based Sprays</u>: Release compounds, sprayed on the inside and outside of green tires, in which solids, water and emulsifiers have been substituted for organic solvents.

2. Rule 205 shall be amended by adding a new section (t) as follows:

- (1) The owner or operator of an undertread cementing, tread end cementing, or bead dipping operation at a pneumatic rubber tire manufacturing facility shall install and operate:
 - (A) A capture system, with a minimum capture efficiency of 65 percent by weight of volatile organic material; and
 - (B) A control device that meets the requirements of one of the following:
 - (i) 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;
 - (ii) 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; or
 - (iii) An alternative volatile organic material emission reduction system demonstrated to have at least a 90 percent overall reduction efficiency and approved by the Agency.
- (2) The owner or operator of a green tire spraying operation at a pneumatic rubber tire manufacturing facility shall:

- (A) Install and operate:
 - (i) A capture system with a minimum capture efficiency of 90 percent by weight of volatile organic material; and
 - (ii) A control device that meets the requirements of one of the following:
 - (aa) 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;
 - (bb) 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
 - (cc) 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:
 - No more than five percent by volume of volatile organic material as applied for the inside of tires; or
 - (ii) No more than 10 percent by volume of volatile organic material as applied for the inside of tires; or
- (3) In lieu of complying with Rule 205(t)(l) or (2), 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 205(t)(l) or (2) on the basis of emissions of volatile organic matter.
- (4) Testing and Monitoring
 - (A) Upon a request of the Agency, the owner or operator of a volatile organic material source required to comply with Rule 205(t) 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.

IX. RACT II SUBMISSION OF COMPLIANCE PLANS

1. Rule 104 shall be amended by adding a new Section (h) as follows:

- (h) RACT II Compliance Plan Submission and Approval
- (1) The owner or operator of an emission source subject to the following shall submit to the Agency a compliance plan, including a project completion schedule, where applicable, no later than:

Days After Rule Promulgation Rules 205(o)(3), 205(s), and 205(t) 90 (A) (B) Rules 205(u)(1)(A) and (B) for 150 facilities located in Cook County; (C) Rule 205(n)(1)(J)((K) and (L); 210 (D) Rule 205(u)(1)(A) and (B) for 240 counties not included in Rule 104(h)(1)(B) or (E); and Rule 205(u)(1)(A) and (B) for 300 (E) facilities located in Boone, DuPage, Kane, Lake, Madison, McHenry, Peoria, Rock Island, St. Clair, Tazewell and Winnebago Counties.

- (2) Unless the submitted compliance plan or schedule is disapproved by Agency, the owner or operator of a facility or emission source subject to the rules specified Rule 205 (h)(1) may operate the emission source according to the plan and schedule as submitted.
- (3) The plan and schedule shall meet the requirements of Rule 104(b) including specific interim dates as required in Rule 104(b)(2).
 - 2. Rule 104(a) shall be revised to read as follows:

(a) Applicability.

- (1) No person shall cause or allow the operation of an emission source not in compliance with the requirements of Rule 205(k)-(v) 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(q) 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.
- 3. Rule 104(g) shall be revised to read as follows:
 - (g) 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:

- 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(1), 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.

19

- (4) By April 1, 1980. Coating lines subject to Rule 205(n), except (n)(1)(J), (K) and (L). 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.
- 4. Rule 205(j) shall be revised to read as follows:
 - (j) 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
Rule 205(a) through (i)	New Emission Sources	April 14, 1972
Rule 205(a) through (i)	Existing Emission Sources	December 31, 1973
Rule 205(k)	All Emission Sources	July 1, 1980
Rule 205(1)(1)-(3)	All Emission Sources	July 1, 1980
Rule 205(1)(4)(10)	All Emission Sources	See Rule 205(m)(4)
Rule 205(n)	All Emission Sources	December 31, 1982*
205(n)(1)(J), (K) and (L)	All Emission Sources	December 31, 1983
205(n)(1)(K)(ii) and (L)(ii)	All Emission Sources	See Rule 205(m)(5)
Rule 205(o)(1) and (2)	All Emission Sources	July 1, 1981
(0)(3)	All Emission Sources	December 31, 1983
Rule 205(p)	All Emission Sources	See Rule 205(m)
Rule 205(g)	All Emission Sources	December 31, 1980
Rule 205(s) and (t)	All Emission Sources	December 31, 1983
Rule 205(u)(l)(A)-(C)	All Emission Sources	December 31, 1983
(u)(l)(D)-(G)	All Emission Sources	December 31, 1982

5. Rule 205(m)(1)(A) and (B) shall be revised to read as follows:

(1) Coating Lines

The owner or operator of coating lines subject to the requirements of Rule 205(n), except (n)(l)(J), (K) and (L), shall take the following actions:

- (A) Submit to the Agency a Compliance Program that meets the requirements of Rule 104(b)(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:
- 6. Rule 205(m)(1)(C) shall be revised to read as follows:
- (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:
- 7. Rule 205(m)(2) shall be revised to read as follows:

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).

8. Rule 205 (m) shall be amended by adding new Sections (5) and (6) as follows:

(5) Coating Lines Subject to Rule 205(n)(1)(K) and (L).

The owner or operator of coating lines subject to Rule 205(n)(1)(K) or (L) shall take 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) by December 31, 1983.
- (B) In addition to the requirements of Rule 205(m)(5)(A), owners or operators of emission sources that under approved compliance plans will comply with Rule 205(n)(1)(K)(ii) and (L)(ii) by use of low solvent coating technology shall 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, 1986.
- (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(h)(l)(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 completion 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 enable the emission source to achieve compliance by the date specified in Rule 205(j); and
 - (ii) 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, 1985 if the specified low-solvent ink strategy fails to achieve scheduled reductions by December 31, 1985.

IT IS SO ORDERED.

Chairman Dumelle concurred.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Order was adopted on the <u>27</u> day of <u>Many</u>, 1982 by a vote of <u>5-6</u>.

Christan L. Moffett,

Illinois Pollution Control Board