

ILLINOIS POLLUTION CONTROL BOARD  
November 20, 1986

IN THE MATTER OF: )  
 )  
PROPOSED AMENDMENTS TO ) R85-21  
35 ILLINOIS ADMINISTRATIVE ) Docket A  
CODE 211 AND 215 )

PROPOSED RULE.                      SECOND NOTICE.

OPINION AND ORDER OF THE BOARD (by R.C. Flemal):

On August 28, 1986, the Board proposed for first notice publication amendments to certain portions of 35 Ill. Adm. Code 211 and 215. The proposed amendments were published at 10 Ill. Reg. 15480, September 26, 1986. The statutory 45-day comment period ended on November 10, 1986.

This matter was initiated by a September 23, 1985, proposal of the Illinois Environmental Protection Agency ("Agency"). The Agency subsequently amended its proposal on December 12, 1985, and March 5, 1986. The Agency's proposal was occasioned by the proposed disapproval of the United States Environmental Protection Agency of some of the regulations adopted by the Board on December 30, 1982, in the RACT II proceeding (R80-5). The Agency believes that the amendments as offered in its proposal would satisfy the objections raised by USEPA.

Hearings were held on December 12 and 13, 1985, in Springfield, Illinois, and on March 6 and 7, 1986, in Chicago, Illinois. On June 17, 1986, the Department of Energy and Natural Resources determined that an economic impact study ("EcIS") would be prepared for only one of the sections contained in the Agency proposal, that being 35 Ill. Adm. Code 215.245. The Economic and Technical Advisory Committee concurred in the Department's determination on June 20, 1986. Consequently, in order to proceed to decision on all but Section 215.245 the Board split R85-21 into two dockets, A and B. Docket A, the subject of this Opinion and Order, deals with all portions of the Agency proposal other than Section 215.245. Docket B, in addition to being the docket in which Section 215.245 will be considered, will of course be the docket in which economic impact hearings will be held once the EcIS pertaining to Section 215.245 is prepared.

The Board received six Public Comments ("PC") during the first notice comment period. These are: PC #16 filed October 24, 1986, by the Agency; PC #17 filed October 31, 1986, by the Illinois Petroleum Marketers Association; PC #18 filed November 6, 1986, by Continental Pipe Line Company; PC #19 filed November 10, 1986, by Outboard Marine Corporation ("OMC"); PC #20 filed November 10, 1986, by the Illinois Environmental Regulatory

Group; and PC #21 filed November 10, 1986, by Unocal Corporation; and PC #22 filed November 17, 1986, by the Illinois Petroleum Council.

Based upon the record in this matter, as supplemented by the Public Comments noted above, the Board has determined that it will propose for second notice a slightly modified version (as described below) of the amendments proposed in its August 28, 1986, Opinion and Order.

A detailed discussion of the history of the RACT II proceeding and the rationale supporting the amendments proposed by the Board is contained in the Board's August 28, 1986, Opinion and therefore will not be repeated here.

#### MODIFICATION TO THE BOARD'S FIRST NOTICE OPINION AND ORDER

The November 10, 1986 comment of OMC notes that the language of proposed Section 215.206(b) can be interpreted to limit the overall VOM emissions from OMC's Waukegan, Illinois, facilities to 35 tons per year. OMC states that it believes the 35 ton per year limitation should pertain solely to these facilities' VOM emissions which are related to the coating of miscellaneous metal parts, rather than to all VOM emissions from the site. OMC proposes a rewording of Section 215.206(b) which it asserts would clarify the Board's intent in proposing the section.

The Board's intent in proposing Section 215.206(b) was in fact to limit the VOM emissions from miscellaneous metal part coating operations at the Waukegan facilities to 35 tons per year. To clarify this intent, the Board will modify Section 215.206(b) as proposed by OMC.

#### CONCLUSION

The Board concludes that none of the other comments submitted during the first notice period warrant further changes to the rules today proposed for second notice. The Board believes that the proposed rules are more than adequately supported by the weight of the record compiled in this proceeding. Moreover, the Board reaffirms that the proposed rules are technically feasible and economically reasonable.

#### ORDER

The Board directs that second notice of the following proposed rules be submitted to the Joint Committee on Administrative Rules:

TITLE 35: ENVIRONMENTAL PROTECTION  
SUBTITLE B: AIR POLLUTION  
CHAPTER 1: POLLUTION CONTROL BOARD  
PART 211  
DEFINITIONS AND GENERAL PROVISIONS  
SUBPART A: GENERAL PROVISIONS

Section 211.122 Definitions

"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), ~~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.

"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.

SUBCHAPTER C: EMISSION STANDARDS AND LIMITATIONS  
FOR STATIONARY SOURCES

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

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 97-66

- 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.

(Source: Added and codified at 7 Ill. Reg. 13601)

#### 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 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 the qualifying average.

#### SUBPART F: COATING OPERATIONS

#### Section 215.206 Exemptions from Emission Limitations

- a) The limitations of this Subpart shall not apply to:
  - a1) 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
  - b2) Sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance provided that:

- 1A) The operation of the source is not an integral part of the production process;
  - 2B) The emissions from the source do not exceed 363 kg (800 lbs) in any calendar month; and
  - 3C) The exemption is approved in writing by the Agency.
- b) The limitations of Section 215.204(i) 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.

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.

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.

Section 215.249 Compliance Dates

Sources subject to this Subpart N shall comply with the applicable limitations within one year of the effective date of the section or by December 31, 1987, whichever is sooner.

SUBPART Y: GASOLINE DISTRIBUTION

Section 215.581 Bulk Gasoline Plants

- a) Subject to subsection (f), 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 ~~balance~~ collection system that meets the requirements of subsection ~~(e)~~ (e)(4);
  - 2) Each vapor ~~balance~~ collection system is operating;
  - 3) ~~Delivery vessel hatches are closed at all times during loading operations, unless a top loading vapor recovery system is used;~~ 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 (g), 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) A vapor balance system shall include the following components:

- 1) A vapor space connection on the stationary storage tank that is equipped with fittings which are vapor tight;
- 2) A connecting pipe or hose that is equipped with fittings which are vapor tight; and
- 3) A vapor space connection on the delivery vessel that is equipped with fittings which are vapor tight.

Repeal

d) Subject to subsection (f), 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.

e) Subject to subsection (f), 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(e)(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 (4)(A) or (B).
- f) The requirements of subsections (a), (d) and (e) 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 350,000 gallons as averaged over the preceding three calendar years.
- g) 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.
- h) Bulk gasoline plants were required to take certain actions to achieve compliance which are summarized in Appendix C.

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; and
  - 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)

#### 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 ~~balance~~ collection system that meets the requirements of subsection ~~(f)~~ (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 and each delivery vessel operator 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 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) Any delivery vessel equipped for vapor recovery by use of vapor control system shall be designed and maintained to be vapor tight at all times during normal operation and shall not be refilled in Illinois at other than:
  - 1) A bulk gasoline terminal that complies with the requirements of Section 215.582; or
  - 2) A bulk gasoline plant that complies with the requirements of Section 215.581(b).

Repeal

- f) A vapor balance system shall include the following components:
  - 1) A vapor space connection on the stationary storage tank that is equipped with fittings which are vapor tight;
  - 2) A connecting pipe or hose that is equipped with fittings which are vapor tight and equipment that ensures that the pipe or hose is connected before gasoline can be transferred; and
  - 3) A vapor space connection on the delivery vessel that is equipped with fittings which are vapor tight.

Repeal

- g) Gasoline dispensing facilities were required to take certain actions to achieve compliance which are summarized in Appendix C.

Section 215.584 Gasoline Delivery Vessels

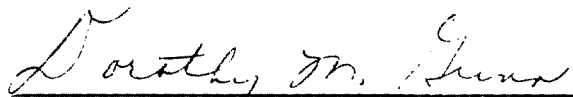
- a) Any delivery vessel equipped for vapor control by use of vapor collection equipment:
  - 1) Shall have a vapor space connection that is equipped with fittings which are vapor tight;
  - 2) Shall have its hatches closed at all times during loading or unloading operations, unless a top loading vapor 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 215.581(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 or other test method approval by the USEPA. Each vessel must be repaired and retested with 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.
- 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 that Subsection. Delivery vessels must display a sticker, decal or stencil acceptable to the state where tested or comply with the requirements of Subsection (b).

IT IS SO ORDERED.

Jacob D. Dumelle concurred.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 20th day of November, 1986, by a vote of 6-0.



Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board