ILLINOIS POLLUTION CONTROL BOARD
August 28, 1986

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

PROPOSED RULE. FIRST NOTICE.

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

This matter comes before the Board upon a proposal of the Illinois Environmental Protection Agency ("Agency") to amend certain portions of 35 Ill. Adm. Code 211 and 215. The Agency filed its proposal on September 23, 1985, and subsequently amended it on December 12, 1985, and March 5, 1986. The Agency's proposal is occasioned by the proposed disapproval[1] of the United States Environmental Protection Agency ("USEPA") of some of the regulations adopted by the Board on December 30, 1982, in the RACT II proceeding (R80-5). It is the Agency's position 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 ("Department") determined that an economic impact study ("EcIS") would be prepared for only one of the sections contained in the Agency proposal. That section, 35 Ill. Adm. Code 215.245, deals with graphic arts (flexographic and rotogravure printing) operations. Regarding the other amendments proposed by the Agency, the Department found that the cost of making a formal study would be economically unreasonable in relation to the value of the study to the Board in determining the adverse economic impact of those proposed regulations. The Economic and Technical Advisory Committee ("ETAC") concurred in the Department's determination on June 20, 1986.

Due to the decision of both the Department and ETAC that an EcIS need be prepared for only a portion of this proceeding, the Board has determined that this docket should be split into two dockets so that the Board might proceed to decision on those portions of the Agency proposal for which no EcIS is being prepared. Therefore, the Board hereby splits R85-21 into Dockets, A and B. Docket A, the subject of this Opinion and

[1]Notice of the proposed disapproval was published at 50 Fed. Reg. 28224 (proposed July 11, 1985).

Order, will be the docket in which all portions of the Agency proposal other than §215.245 will be considered. Docket B, in addition to being the docket in which §215.245 will be considered, will of course also be the docket in which economic impact hearings will be held once the EcIS pertaining to §215.245 is prepared.

HISTORY OF RACT II

The origin of this proceeding is rooted in the requirements of the Clean Air Act ("CAA") (42 U.S.C.A. §7401 et. seq.). Pursuant to §109 of the CAA, USEPA adopted a National Ambient Air Quality Standard ("NAAQS") for ozone. Attainment of this NAAQS was to have been demonstrated for all areas of the state by December 31, 1982, according to the provisions of §172(a)(1) of the CAA. However, Illinois was unable to make such a demonstration. It therefore applied for and received an extension of this deadline until December 31, 1987 (pursuant to the provisions of §172(a)(2) of the CAA). As a prerequisite to obtaining this extension, Illinois was required in the interim to include in its State Implementation Plan ("SIP") for areas which are nonattainment for ozone "such reduction in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology" (§172(b)(3) of CAA).

"Reasonably available control technology" ("RACT") is not defined in the CAA. However, USEPA has promulgated industry-specific "Control Technology Guidelines" ("CTGs") that are intended to describe RACT for a given industry and assist states in determining RACT. USEPA has published three groups of CTGs. The RACT II proceeding (In the Matter of RACT II Rules, R80-5) was intended to satisfy the RACT requirements as outlined by the second group of CTGs.[2] USEPA disapproved certain of the rules adopted by the Board in RACT II (discussed specifically, below) because, in general, it found those rules to be "inconsistent with the requirements of RACT".[3] The present Agency proposal represents, therefore, another attempt by the Agency to have enacted regulations representing RACT for those source categories included in the second group of CTGs.

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[2]The second group of CTGs covered the following source categories: factory surface coating of flatwood paneling; petroleum refinery fugitive emissions; pharmaceutical manufacturing; rubber tire manufacturing; surface coating of miscellaneous metal parts and products; graphic arts (printing); dry cleaning perchloroethylene; leak prevention from gasoline tank trucks and vapor collection systems; petroleum liquid storage in external floating roof tanks.

[3]Exhibit ("Ex.") 3, p. 28225.

USEPA PROPOSED DISAPPROVAL OF RACT II

Specifically, the USEPA on July 11, 1985, proposed to disapprove all or portions of the following rules adopted by the Board in RACT II:

1.	the definition of "Miscellaneous Metal Parts and Products" contained in Rule 201	(now found in §211.122)
2.	Rule 205 (s)(2)	(now §215.402; provides an exemption to the limitations of Subpart P for any facility whose aggregate uncontrolled rotogravure and/or flexographic printing press emissions of volatile organic material are 1,000 tons/year or less in the absence of air pollution control equipment, or whose similar emissions would be less than 1,000 tons/year when averaged over the preceeding three calendar years)
3.	Rule 205 (s)(1)(D)(ii)	(now §215.401(d)(2); applies to the packaging rotogravure process and provides that a capture system used in conjunction with an emission control system must, in combination, provide an overall reduction in volatile organic emissions of at least 65% or the maximum reduction achievable using good engineering design)
4.	Rule 205 (n)(1)(K)	(now §215.204(k); deals with emissions limitations for the painting of Heavy Off-Highway Vehicle Products during manufacture, and allows 4.3 lbs VOM/gallon of coating for an extreme performance top coat and 4.8 lbs VOM/gallon of coating for final repair coating)

5. Rule 205 (o)(3)(D)(iv) (now §215.124(b)(4); exempts stationary storage tanks equipped with an external floating roof which are used to store crude oil from the §215.124(a) requirement of use of a secondary seal)

Also in the July 11, 1985, proposed disapproval, USEPA found the Board's regulations deficient in the CTG categories of synthetic pharmaceutical manufacturing and leak prevention from gasoline tank trucks and vapor collection systems.[4] The Agency has not proposed regulations in this proceeding dealing with synthetic pharmaceutical manufacturing[5], nor with the coating of heavy, off-highway vehicle products. Therefore regulations pertaining to those CTG categories will not be addressed in this proceeding. Also, since the Board has now split R85-21 into two dockets, USEPA's disapproval of Rules 205(s)(2) (§215.402) and 205(s)(1)(D)(ii) (§215.401(d)(2)) will be addressed at a later date in Docket B. This Opinion and Order will address, therefore, USEPA's disapproval of Illinois regulations pertaining to the CTG source categories of miscellaneous metal parts and products, petroleum liquid storage in external floating roof tanks, and leak prevention from gasoline tank trucks and vapor collection systems.

MISCELLANEOUS METAL PARTS AND PRODUCTS

The Agency proposes to amend the definition of "Miscellaneous Metal Parts and Products" found at 35 Ill. Adm. Code 211.122 so as to delete the exemption currently found there for the exterior of airplanes and marine propulsion equipment.

These amendments are in response to USEPA's proposed disapproval of the exemption for the exteriors of airplanes and marine propulsion equipment. USEPA's disapproval of these exemptions is based on that agency's belief that "the Group II CTG's are intended to apply to marine propulsion equipment and the exteriors of airplanes (if the airplane exteriors are coated as a separate manufacturing operation)." Ex. 3, p. 28226.

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[4]In RACT II, R80-5, 49 PCB 67 (1982) the Board did not adopt rules pertaining to either of these categories. The Board indicated at that time that it believed application of RACT technology to the relevant synthetic pharmaceutical plants in Illinois would not be economically reasonable (pps. 27-28), and that the gasoline tank truck category was addressed by existing Board rules (p. 2).

[5]The Agency has a pending proposal on this topic in the R86-10 docket.

Regarding the latter, the Agency has concluded that no operations for coating the exterior of airplanes exist in the State and therefore proposes the exemption for this category be deleted. The Board has received no information on the record indicating that any operations of this nature do exist in Illinois. Given this circumstance, the board is at a loss to understand USEPA's insistence on enactment of a rule for which there are no applicable facilities. However, the Board is aware that failure to gain USEPA approval on this matter could jeopardize Illinois' ability to gain approval of its SIP. Since approval of the SIP is vital to the public interest and promulgation of the rule would be at no cost to the State, the Board will concede to the USEPA on this matter and delete the exemption for the exterior of airplanes from the definition of "Miscellaneous Metal Parts and Products".

The Agency proposes to delete the exemption for marine propulsion devices based on USEPA's proposed disapproval of that exemption, as well as on its belief that compliance coatings are or in the near future will be available for use with marine propulsion equipment (Tr. 2 at 29). In fact, the Agency states that the Wisconsin manufacturing facility of Outboard Marine Corporation ("OMC"), the same corporation for which the marine propulsion exception was made in Illinois) has used extreme performance coatings which meet the limit of 3.5 lbs VOM/gallon (Ex. 2, p. 3) found at 35 Ill. Adm. Code 215.204(j)(3).

The Agency notes that OMC's Waukegan, Illinois, facilities are the only emission sources that would be affected by a deletion of the exemption (Tr. 2 at 27)[6]. The VOM emissions from the facilities occur as a result of painting the following items:

- Outboard motors, 70 horsepower and above
- Miscellaneous small parts
- Outboard motor exhaust component parts

Tr. 3 at 194-199; P.C. #8, Attachment C.

[6]Hearings in this proceeding were conducted over four days, and a separate bound transcript was developed for each day. Unfortunately, the four transcripts are not paginated consecutively. Consequently, the transcripts of the first two days of hearing must be referred to individually, as follows: The transcript of the December 12, 1985, hearing will be referred to as "Tr. 1"; similarly, the transcript of the December 13, 1985, hearing will be "Tr. 2". The transcripts of the March 5 and 6, 1986, hearings are numbered consecutively (pps. 1-570). These two transcripts can therefore be referred to together as "Tr. 3".

OMC testified at hearing in R80-5 that it was unable to meet the 3.5 lbs VOM/gallon emission limit due to the unavailability of a compliance coating which could meet the company's performance standards, and also because of the expense and infeasibility of installing control equipment at the Waukegan facilities (Ex. 31). Nevertheless, USEPA determined that OMC's testimony did "not adequately document their inability to install add-on controls or explain why a time extension would not constitute sufficient relief" (Ex. 4, p. 3).

The Agency presented testimony at the December 13, 1985 hearing in support of its proposal to delete the marine propulsion equipment exemption. Dr. John Reed, Supervisor of the Technical Support Unit of the Agency's Air Quality Planning Section, testified that OMC's Milwaukee, Wisconsin facility also produces outboard motors and has tested a high solids coating which meets the 3.5 lbs VOM/gallon limitation and satisfies OMC's performance standards (May 22, 1985, letter from Thomas C. Sweet, Corporate Environmental Engineer, OMC, to Wolf Klassen, Director, Southeast Air Region, Wisconsin Department of Natural Resources; this letter is part of group Exhibit 23). The Agency has also made reference to correspondence between the Wisconsin Department of Natural Resources ("DNR") and the USEPA Region V office regarding the marine propulsion device exemption in Illinois. DNR strongly objected to the existence of this exemption due to that agency's own efforts to enforce the adopted limits on the outboard marine engine industry located in Wisconsin (Tr. 2 at 28-29; Ex. 20). OMC agreed to a plan in 1981 to bring its Milwaukee facility into compliance[7] by the end of 1985 (Id. at 29; Ex. 23). OMC is apparently behind schedule in meeting that plan and needs more time to design spray equipment to use with the compliance coatings, but has indicated to DNR that it still intends to come into compliance (Tr. 2 at 29; Ex. 23).

J. Roger Crawford, Corporate Director of Environmental Control for OMC testified on behalf of OMC at the March 5, 1986, hearing in opposition to the Agency's proposed deletion of the marine propulsion equipment exemption. Mr. Crawford indicated that OMC finds the proposed deletion is "unjustified economically" due to the differences between OMC's Milwaukee and Waukegan facilities. Those differences, OMC contends, make utilization of high solids coatings at the Waukegan facility "extremely expensive, in fact more expensive than even add-on technology" (Tr. 3 at 180).

OMC insists that before high solids coatings could be used at the Waukegan plant, substantial modifications would have to be made to its parts washing and air handling systems and additional

[7]Wisconsin has the same emission limitation for extreme performance coating as does Illinois: 3.5 lbs. VOC/gallon (Tr. 2 at 28).

equipment would need to be installed. At the Milwaukee facility, according to OMC, the plant layout did not have to be modified to accommodate the use of compliance coatings, nor did as much new equipment need to be installed. The capital cost associated with the changes at the Waukegan plant is estimated by OMC to be in excess of $1 million, and would entail an estimated annual cost of $371,000 (Tr. 3 at 186-187; P.C. #8, Attachment C). The Agency assumes that utilization of compliance coatings at the Waukegan plant would reduce emissions by an average of 30% (Tr. 2 at 29-30), while OMC calculates the emissions reduction would be about 19% (P.C. #8, Attachment C). Utilization of high solids coatings at the Waukegan facility would therefore reduce the VOM emissions from that plant by 6-9 tons/year. Using OMC's cost estimates for the plant modifications necessary in order to use compliance coatings, the eliminated emissions would be achieved at a cost of between $41,000 and $62,000[8] per ton.

OMC estimates that add-on controls could be installed at the Waukegan plant at lesser cost, but still contends the cost involved would be unjustified. OMC submitted written cost estimates obtained from vendors of incineration and solvent concentrator systems. Installation of either of these systems would reduce plant emissions by 90% from the current level, and would require annual capital costs of $504,000 and $438,000, respectively. The cost per ton of VOM removed by these systems would be $18,500 and $16,100, respectively (P.C. #8, Attachment B).

OMC noted that if the marine propulsion equipment exemption is deleted, it would be "highly unlikely" that OMC would continue any assembly or surface coating operations at the Waukegan facility (Tr. 3 at 181). Discontinuing those operations would result in the loss of approximately 300 jobs at the Waukegan plant (Tr. at 261).

Much of the detailed economic information on the cost for OMC to comply was provided after hearing (OMC Comments, July 9, 1986). The Agency objected to this late filing and pointed out that they had requested detailed information much earlier in the proceeding. However, the Agency specifically rejected additional hearings to probe the validity of this information, and failed to provide a rationale for rejecting it or data to refute it.

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[8]This number appears as $41,000 on page 1 of Attachment C to OMC's comments filed on July 9, 1986 (referred to as P.C. #8). This seems to have been an error in OMC's calculations. OMC contends that emissions reductions would amount to 6 tons/year, yet it divided the annual cost by 9 tons/year, the reduction figure espoused by the Agency.

PETROLEUM LIQUID STORAGE IN EXTERNAL FLOATING ROOF TANKS

The Agency proposes a new section for adoption, 35 Ill. Adm. Code 215.341. That section would read as follows:

Section 215.341 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.

The proposed addition of this section by the Agency is intended to address USEPA's proposed disapproval of Rule 205 (o)(3)(D)(iv) (now §215.124 (b)(4)) in R80-5. Section 215.124 (b)(4) exempts all external floating roof storage tanks used to store crude oil from the provisions of 35 Ill. Adm. Code 215.124 (a) (which requires, inter alia, the use of secondary seals on external floating roof tanks used to store volatile petroleum liquids). USEPA has proposed to disapprove this exemption as being overbroad. Proposed section 215.341 would narrow the exemption to "waxy, heavy pour" crude oils, which USEPA itself exempts from the seal requirement (Id.).

The Agency presented testimony at the December 12, 1985, hearing in support of its proposal to add §215.341. Dr. John Ting, an Environmental Protection Specialist in the Technical Support Unit of the Agency's Air Quality Planning Section, testified that §215.341 is necessary since Illinois cannot make the required showing to prevent USEPA from disapproving §215.124(b)(4) (Tr. 1 at 95). Such a showing, which would allow Illinois to continue to exempt all external floating roof storage tanks storing crude oil from the secondary seal requirement, would have to include evidence either that it is unreasonable to require the use of secondary seals in this circumstance, or that the allowable emissions under Illinois' existing regulation meet USEPA's 5% "equivalency" rule[9] (i.e. are within 5% of the

USEPA's 5% "equivalency" rule[9] (i.e. are within 5% of the allowable emissions anticipated by the CTG) (Tr. 1 at 94-95; Ex. 3, p. 28226).

The Agency determined there are 92 crude oil storage tanks in the counties affected by the proposed regulation (Tr. 1 at 98; for a discussion of why only certain counties would be subject to proposal §215.341 and to proposed subpart H in general, see page 18). The Agency calculated that the uncontrolled (i.e. without secondary seals) emissions from those tanks are 309 tons/year (Tr. 1 at 98); if RACT (as defined by the CTG for this category) was applied to these tanks, emissions would be reduced by 293 tons/year (Id.). The 293 ton/year figure is accurate if none of the crude oil stored in the tanks is of the waxy, heavy pour variety; a survey conducted by the Agency indicated that only 1% of the crude oil stored in external floating roof storage tanks located in nonattainment counties is the waxy, heavy pour type (Tr. 1 at 131). Therefore, the "allowable" emissions from the 92 affected tanks, after the installation of secondary seals, is approximately 16 tons/year (Id.).

The Agency performed a "cost effectiveness" analysis of controlling VOM emissions on a per ton basis through the use of secondary seals, and concluded that the $462[10] cost ton/VOM reduced "does not appear to be unreasonable in comparison with the control costs for other RACT categories" (Tr. 1 at 101). To calculate this figure, the Agency relied on a cost estimate for secondary seal installation provided by Tanco Engineering Inc. ("TANCO"). TANCO estimated the cost of installing a secondary seal to be $20/linear foot of tank circumference (for a welded shell tank; see Ex. 15). The $20/foot cost is significantly lower than an estimate for the same work provided by the Chicago Bridge and Iron Company ("CB&I"). CB&I provided a cost estimate of $55/linear foot (Tr. 3 at 412). The CB&I estimate very

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[9]USEPA's 5% "equivalency" rule is intended to allow states flexibility in developing regulations which define RACT differently than do the CTGs (Tr. 3 at 27). The rule is applied as follows: If a state elects to make a showing that its emissions from sources falling within a particular CTG category meet this rule, the state must determine the total emissions allowed by the CTG (i.e., after application of the control technology prescribed there; the resulting level of control is referred to by USEPA as the "presumptive norm"). This level of emissions is then compared to the emissions allowed (including exemptions) by the state regulation. If there is less than a 5% difference in allowable emissions, USEPA will determine the state regulation to be "equivalent" to the presumptive norm (Tr. 3 at 28; Ex. 26(b)). For numerical examples of the application of this rule, see Tr. 1 at 14-15 and Tr. 3 at 28-29.

[10]For a detailed analysis regarding how this figure was calculated, see Ex. 11, pps. 5, 13.

closely approximates the cost estimate for this work found in the 1978 CTG for this category. That document provides the USEPA's estimate of a cost of $54/linear foot for installation of secondary seals (Tr. 1 at 109; Ex. 12, p. 4-7).

The Agency also evaluated whether the allowable emissions under existing §215.124(b)(4) are within 5% of those allowed by the CTG, and thus whether the 5% "equivalency" rule can be met by §215.124(b)(4). The Agency calculated that the emissions allowed by that section are 124% greater than those allowable under the CTG, so determined that the 5% "equivalency" rule cannot be met by the existing regulation (Tr. 1 at 99-100; Ex. 11, p. 12).

Messrs. Darrell W. Bruckert and Joseph A. Fisher testified for the Illinois Petroleum Council ("IPC") in opposition to proposed §215.341. IPC also sponsored testimony in the R80-5 proceeding in opposition to a proposal requiring the installation of secondary seals on crude oil tanks (Tr. 3 at 425). IPC contends that such a requirement would impose "an unnecessary and excessive economic burden on the petroleum operations in the State of Illinois" (Id.).

IPC believes that USEPA's proposed disapproval "gives little or no insight" as to why USEPA found the exemption of crude oil storage tanks from the secondary seal requirement to be deficient (Id. at 433). More revealing, from IPC's perspective, was an internal USEPA memorandum[11] addressing the SIP revision material submitted to USEPA by the Agency after the R80-5 proceeding. In that memorandum its author, William M. Vatavuk of the Economic Analysis Branch, stated that in his opinion the cost effectiveness value (i.e., cost per ton of reduced VOM emissions) of $2,410/ton calculated by IPC was "quite reasonable", but that a higher cost effectiveness figure does not alone justify excluding crude oil storage tanks from RACT II controls. (Tr. 3 at 434; Ex. 5).

IPC also questions why installing secondary seals on crude oil storage tanks is necessary since, according to its calculations, due to the application of the secondary seal requirement to gasoline tanks in attainment areas[12] the Illinois SIP will achieve 13% more emission reductions statewide than anticipated by the CTG for this category (Id. at 439-440). IPC estimates that installation of secondary seals on crude oil

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[11]This memorandum was referred to and apparently relied upon by USEPA in the document "Revision to TSD for Illinois RACT II Regulations", and is attached to that document, which has been admitted unto the record in this proceeding as Exhibit 5.

[12]The Board adopted regulations requiring the installation of secondary seals on gasoline storage tanks in attainment areas in the RACT II proceeding, R80-5.

storage tanks would reduce VOM emissions by approximately 200 tons/year (Tr. 3 at 445; Ex. 44).

In written comments submitted to the Board on July 23, 1986, USEPA indicated that "a chief reason for USEPA's disapproval is the fact that the cost effectiveness (C/E) value submitted by the IPC is consistent with the C/E values in the CTG and the CTG considers secondary seals on crude oil storage tanks to constitute RACT" (Id.).

In response to IPC's concerns questioning why further emission reductions are necessary in this category (given that emissions have already been reduced to 13% less than those allowed by the CTG), USEPA answered that emission reductions in attainment areas cannot be used to make up for insufficient reductions in areas that do not attain an NAAQS; that is, emission reductions in attainment areas cannot be traded for required reductions in nonattainment areas (Id. at 6).

LEAK PREVENTION FROM GASOLINE TANK TRUCKS AND VAPOR COLLECTION SYSTEMS

In the R80-5 proceeding, the Board did not adopt new regulations pertaining to leak prevention from gasoline tank trucks and vapor collection systems. In its October 5, 1982, Opinion, the Board stated that it believed the category to be covered by existing Board rules. However, USEPA indicated in the July 11, 1985 Proposed Rulemaking that Illinois' existing regulations are "not adequate to satisfy the requirements of leak tightness for gasoline tank trucks" (Ex. 3, p. 28226). More specifically, USEPA concluded that Rule 205(p)(5) (now §215.583(e)) is inadequate in that it requires delivery vessels equipped with vapor recovery control systems to be designed and maintained to be vapor tight during normal operations, yet fails to define what is meant by "vapor tight" (Ex. 3, p. 28226).

The Agency proposes to remedy this possible deficiency by adding a definition for "Vapor Collection System" to §211.122 (see p. 20), and by amending Part 215, Subpart Y in the following manner. The agency proposes to amend this potential deficiency by amending the three existing sections of Part 215, Subpart Y, and by adding a new section, 35 Ill. Adm. Code 215.584, to that Subpart. The Agency proposes that these amendments and addition apply to all counties in which the Stage 1 vapor recovery program applies, since they are "integral" to that program (P.C. #7, p. 19). For the sake of brevity, the three existing sections and the respective proposed amendments to them will not be reprinted in the Opinion. Rather the amendments as proposed by the Agency will be discussed.

These amendments would require that vapor recovery systems operated at bulk gasoline plants, bulk gasoline terminals, and gasoline dispensing facilities be operated as so to meet

prescribed pressure levels. Compliance with these levels would be shown through use of a pressure tap or equivalent on the vapor collection system. These amendments would prohibit gasoline delivery vessels from using any of the facilities described by these sections unless those vessels display an inspection sticker as required by proposed §215.584(b) or (d). The Agency also proposes to add provisions in each section to require that repair and retesting of equipment found not to be vapor tight be done within 15 days of the discovery of the leak. Finally, the Agency proposes to insert "collection" in lieu of the word "balance" in the phrase "vapor balance system". The Agency proposes this latter change for purposes of consistency because the CTG for this category (admitted unto the record in this proceeding as Ex. 9) uses the expression "vapor collection system". The Agency suggests that in practice, "vapor balance system" and "vapor collection system" have the same meaning (Ex. 32, pps. 1-2).

The Agency also proposes to add a new section to Subpart Y, that would read as follows:

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 approved by the USEPA. Each vessel must be repaired and retested within 15 days 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).

Section 215.584 would require, inter alia, gasoline delivery vessels to be tested annually in accordance with a USEPA approved test method. The Agency's intention is that such vessels failing this type of leak-tight test would be required to undergo repair and retesting within 15 days after the leak is discovered by the owner, operator, or the Agency (P.C. #7, p.20).

The proposed amendments to Subpart Y have been developed in major part by the Agency in consultation with IPC's Environmental Quality Committee (Tr. 1 at 42; Tr. 3 at 327-328). Dr. John Ting testified in reference to the Agency's proposed amendments to Subpart Y. Dr. Ting's testimony indicated that these amendments would be extremely cost effective, as the value of the gasoline recovered as a consequence of the regulations would exceed the cost of control (Tr. 1 at 36-37). Darrell Bruckert, Chairman of IPC's Environmental Quality Committee, testified on behalf of IPC at the March 6 hearing. Mr. Bruckert testified that in all aspects of the proposed amendments to Subpart Y, with the exception of the matter of the time limit associated with repair and retesting, IPC supports adoption of the amendments as proposed by the Agency and urges the Board to adopt them

"expeditiously" (Tr. 3 at 328).

The issue of requiring that leaks associated with gasoline tank trucks and vapor collection systems be repaired and retested within a specified time limit, proposed to be 15 days by the Agency, was initially raised in the Agency's presentation at the March 5 hearing in this matter. The Agency indicated at that time that the 15-day time limit is prescribed in the CTG for this category and had previously been inadvertently omitted (P.C. #7, p. 20).

Darrell Bruckert testified at the March 6 hearing in support of a differing proposal regarding the time limit for repair and retesting of this equipment. This alternative proposal was formulated by the Illinois Petroleum Marketers Association ("IPMA"), and would essentially expand the deadline for repair and retesting to 30 days (Tr. 3 at 328; P.C. #10). IPMA believes the proposed 15-day limit does not provide adequate time to set up a repair and retesting schedule, but that the 30-day limitation could be met without undue hardship (P.C. #1, pp. 1-2).

IPMA bases this conclusion on the results from an informal survey it conducted of facilities in Illinois which do repair and retesting work on gasoline tank trucks. This survey indicated that these facilities believe 15 days to be an insufficient time within which to accomplish the required work (P.C. #1, p. 1). Rather, the facilities suggested that the Agency pattern its proposal after the policy of the Illinois Department of Transportation, Hazardous Materials Division, on this issue. IPMA characterized the Hazardous Materials Division's policy as allowing owners or operators 15 days after discovery of a leak to contact a repair and retesting facility in order to receive a work order specifying the date the work is to take place. The policy further requires that the date be within 30 days of the time the leak was discovered (P.C. #1, p. 1).

IPMA also takes issue with the Agency's rationale behind comparing Illinois with its bordering states on the issue of the reasonableless of the 15 day rule. William R. Deutsch, Executive Vice President of IPMA, noted in a July 29, 1986 letter to the Board that

> Illinois has, by far, the largest population and the greatest number of automobiles. Illinois has the most petroleum marketers owning their own transports. Additionally, Illinois has more miles of roads, which means more gasoline consumption, which means more transports to deliver the product, which means the greater likelihood for repairs and retesting, which means more time is needed to service these transports given the limited number of repair facilities (P.C. #10, p. 1).

The Agency has indicated at hearing and in its written comments that it would interpret and implement the 15-day rule, if adopted by the Board, as follows. The period would begin on the date the leak is first detected, and would consist of 15 calendar (rather than business) days within which the repair and retesting must take place (Tr. 3 at 335; P.C. #7, p. 20). The Agency did suggest at hearing that it would also allow a seven to ten-day period, immediately after the 15-day period had expired, for the results of the retesting to travel by mail to the Agency offices before any enforcement action would be initiated (Tr. 3 at 335-336).

CONCLUSIONS

Miscellaneous Metal Parts and Products

The Board today proposes to delete the marine propulsion equipment exemption from §211.122. USEPA has indicated that the CTG for this category is intended to apply to marine propulsion equipment, and the Board believes it appropriate that Illinois' general regulations reflect this intention.

That position notwithstanding, the Board concludes that OMC has adequately demonstrated the economic unreasonableness that would result if its Waukegan facilities were required to utilize add-on control equipment or high solids coatings in order to meet the limitations of §215.204(j). As previously discussed, the cost per ton of VOM removed by these approaches would range from $16,000 to $62,000. (Agency Responsive Comment). The Board believes that level of expenditure is economically unreasonable, particularly given the volume of emissions that would be recovered through either of the two compliance approaches. For that reason, the Board today also proposes for first notice publication amendments to 35 Ill. Adm. Code 215.206, which would create a site-specific exemption from §215.204(j) for OMC's Waukegan facilities.

Petroleum Liquid Storage in External Floating Roof Tanks

The Board believes that it is technically feasible to require the installation of secondary seals on external floating roof crude oil storage tanks (other than those used to store waxy, heavy pour crude oils). The Board will, therefore, propose §215.241 for first notice publication.

The Board realizes that in the prior RACT II proceeding, in exempting all external floating roof crude oil storage tanks from the secondary seal requirement, the Board concluded that "the low cost-effectiveness, coupled with the small quantity of emissions at stake, indicate that secondary seals should not be considered RACT for crude oil tanks" (R80-5, 49 PCB 67, 90, October 5, 1982). There are two principal reasons why the Board today

alters its former position.

First, the information received on the record in this matter indicates the use of secondary seals on crude oil storage tanks to be cost-effective. The Agency and IPC have submitted varying estimates of the cost per ton of recovering VOM emissions through the use of secondary seals. The Agency testified that this cost is $462 ton if crude oil is valued at $29.60/barrel (Tr. 1 at 101). Using a crude oil price of $13/barrel, which more closely approximates the price of crude oil today, the Agency's calculations would render a cost per ton of VOM recovered of $638 (see Exhibit 11, p. 13). IPC believes the cost per ton of VOM recovered to be $2,410 and, as discussed above, introduced evidence indicating that USEPA found that figure to be reasonable.

Assuming arguendo that IPC's cost estimate is the most accurate, this cost-effectiveness value is consistent with that envisioned by the CTG for this category (P.C. #9, p. 5). Moreover, the $2,410 per ton figure cannot be evaluated in isolation. The CTG for this category describes secondary seals as RACT for external floating roof tanks, and does not make any distinctions based on the contents of the tanks (except for those containing waxy, heavy pour crudes). This would indicate that USEPA's determination as to what technology constitutes RACT for this category considered VOM emissions from external floating roof petroleum liquid storage tanks in the aggregate (i.e., both those storing gasoline and those storing crude oil). Thus the net savings enjoyed by facilities installing secondary seals on gasoline storage tanks should be used to offset the cost incurred by installing such seals on crude oil storage tanks. The record indicates that the major sources affected by §215.241 have both gasoline and crude oil storage tanks (Tr. 3 at 462, 469). The cost-effectiveness value for reducing VOM emissions from crude oil storage tanks therefore becomes even more reasonable when offset by the net credit (or reduction in costs) brought about by the secondary seal requirement on gasoline storage tanks.

Second, all other Region V states and those non-Region V states bordering Illinois with ozone nonattainment areas have either promulgated USEPA approved regulations pertaining to the secondary seal requirement for crude oil storage tanks, or are not required to have RACT regulations due to having achieved attainment status (Ex. 34). That reality works to preclude the Board from determining that requiring secondary seals on crude oil storage tanks in Illinois might be economically unreasonable; it is difficult to ascertain what might make such a requirement unreasonable in this State but reasonable (and RACT) virtually everywhere else; nor does the Record provide any justification for such a distinction.

Leak Prevention from Gasoline Tank Trucks and Vapor Collection Systems

The Board also determines that the Agency's proposed amendments and addition to Subpart Y are technically feasible and economically reasonable, and proposes them, with two slight modifications, for first notice publication.

As noted above, these proposed changes to Subpart Y have been formulated by the Agency in cooperation with IPC's Environmental Quality Committee. This effort represents a notable example of the regulating and regulated communities working together to bring about results which are both environmentally beneficial and economically reasonable. There has been one point of contention, however, between the Agency and IPC, and that is the time frame within which leaking gasoline tank trucks and vapor collection systems must be repaired and retested.

The Board believes that a 15-day period for repair and retesting after a leak has been discovered, though not allowing a great deal of leeway to an owner or operator, should provide ample time for the required repair and retesting work to take place. Indiana, Kentucky, Missouri, and Wisconsin also require an owner to repair and retest within 15 days (P.C. #7, p. 20).

However, the Board concludes it is appropriate to provide that those 15 days be "business", and not "calendar", days. Depending on the day the leak is discovered, as many as five days of the 15 day period may consist of Saturdays and Sundays, days on which repairs may be difficult to obtain. The effective time for repairs and retesting in that instance would be reduced to 10 days, which places an unreasonable burden on owners and operators of this equipment. This slight alteration of the Agency's proposal is intended to balance the necessity of getting repair and retesting work done in a timely fashion with the difficulty, as expressed by IPMA, of accomplishing these tasks within 15 days.

Consequently, the Board will insert "business" after the number "15" and before the word "days" in §§215.581(e)(6), 215.582(d)(3), 215.583(d)(5), and 215.584(a)(6). Also, to clarify the issue of responsibility for discovering leaks, the Board will add the words "after discovery of the leak by the owner, operator, or the Agency" after the word "days" in the same sections as noted above. This change, which is supported by the Agency (P.C. #7, p. 21), specifies that the time period for repair and retesting begins to run when an owner or operator discovers a leak in its own equipment, as opposed to being initiated only by those instances when the leak is discovered as a result of an Agency check.

OTHER DETERMINATIONS

The Agency has also proposed several other amendments, none of which have generated any appreciable amount of controversy.

To 35 Ill. Adm. Code 215.105, the Agency proposes to add reference to a document which contains the test methods to be used in establishing that gasoline dispensing facilities are leak-tight. The source is referred to in several of the Agency's proposed amendments to Subpart Y.

In addition, the Agency proposes to add a new section, 215.107, in order to clarify certain language used in 35 Ill. Adm. Code 215.245, 215.402, 215.581(f)(2), and 215.581(g)(1). Section 215.107 is intended to clarify the applicability of those regulations, all of which are qualified by the words "when averaged over the preceeding three calendar years".

Finally, as part of the proposed new Subpart H, the Agency proposes the adoption of two sections, 35 Ill. Adm. Code 215.240 and 215.249, in addition to §215.241. Section 215.240 would specify the counties in which affected sources must comply with the requirements of Subpart H. The Agency lists those counties as Cook, DuPage, Kane, Lake, Macoupin, Madison, McHenry, Monroe, St.Clair, and Will. All except McHenry and Will are officially designated as ozone nonattainment areas. Section 172 of the CAA requires sources in nonattainment areas only to apply RACT. The Agency proposes that McHenry and Will counties also be included within the scope of Subpart H (even though both are in attainment for ozone) for several reasons. First, they have traditionally been included in the calculations pertaining to the Chicago urban area for purposes of developing the SIP for ozone. Second, the emissions from sources within those counties are thought to substantially impact the ozone air quality of the Chicago urban area. Finally, the emission reductions from currently adopted and proposed RACT regulations to sources in these counties have already been included in SIP analyses and are necessary to demonstrate and achieve attainment of the ozone standard in the Chicago urban area (P.C. #7, p. 7). The Board received no testimony or written comments in opposition to §215.240 from sources in the affected counties.

Section 215.249 specifies that sources subject to Subpart H must comply with the applicable limitations within one year of the effective date of the section or by December 31, 1987, whichever occurs first.

The Board finds proposed §§215.105, 215.107, 215.240, and 215.249 to be reasonable and necessary, and will propose all of them for first notice publication.

PROCEDURAL MATTERS

The Agency has made two motions to correct transcripts, one pertaining to the transcript of the December 12 hearing and a portion of the transcript of the December 13 hearing, and the other to the transcripts of the December 13 and March 5 and 6 hearings. Those motions are granted.

The Agency has also made several motions involving requests to admit certain materials as exhibits. The Agency submitted with its Comment on July 9, 1986, a series of five attachments intended as responsive to requests for information made at the March 6 hearing. At that time an Agency witness was asked whether the other USEPA Region V states possess approved (i.e., by USEPA) rules for the Group II CTG categories. Being unable to accurately answer the questions at that time, the Agency agreed to submit written materials in response, and a number on the Exhibit List (No. 35) was reserved by the Hearing Officer for these materials specifically. Having now been received, these materials are hereby admitted onto the record as Exhibit 35.

The Agency, in its July 9 Comment, also requests that the Board admit as exhibits documents that had been numbered 26(a)-(c) at hearing. This motion is denied as unnecessary. The Hearing Officer admitted Exhibits 26(a) and (b) onto the record at the March 5 hearing (Tr. 3 at 126), and, as discussed at that time, the document that had been labeled 26(c) in fact had already been admitted onto the record as Exhibit 5.

ORDER

The Board hereby proposes the following amendments for first notice publication. The Clerk shall cause first notice publication of these proposed amendments in the Illinois Register:

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

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

~~b~~2) Sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance provided that:

~~1~~A) The operation of the source is not an integral part of the production process;

~~2~~B) The emissions from the source do not exceed 363 kg (800 lbs) in any calendar month; and

~~3~~C) 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 from 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

Nothwithstanding 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 H 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 ~~(c)~~(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 tights.~~

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 Order was adopted on the 28th day of August, 1986, by a vote of 6-0.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board