

ILLINOIS POLLUTION CONTROL BOARD
February 17, 1994

IN THE MATTER OF:	)	
	)	
STAGE II VAPOR RECOVERY IN	)	R93-28
THE METRO-EAST AREA: REPEAL	)	(Rulemaking)
OF 35 ILL. ADM. 219.586	)	

Adopted Rule. Final Order.

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

This matter comes before the Board upon a petition from the Illinois Environmental Protection Agency (Agency) to repeal the Stage II vapor recovery controls applicable in the Metro-East area (Madison, Monroe, and St. Clair Counties, Illinois).

Repeal of the Stage II regulations is connected with adoption by the United States Environmental Protection Agency (USEPA) on January 24, 1994 of rules that govern on-board vapor recovery (OBVR) systems (see discussion following). The participants in this proceeding believe that the Metro-East Stage II regulations are unnecessary and unwarranted in the presence of federal OBVR regulations. The Board agrees, and accordingly by today's action adopts the repealer.

The Board's responsibility in this matter arises from the Illinois Environmental Protection Act (Act) (415 ILCS 5/1 et seq.). The Board is charged under the Act to "determine, define and implement the environmental control standards applicable in the State of Illinois" (Act at Section 5(b)). More generally, the Board's rulemaking charge is based on the system of checks and balances integral to Illinois environmental governance: the Board bears responsibility for the rulemaking and principal adjudicatory functions, whereas the Agency is responsible for carrying out the principal administrative duties.

PROCEDURAL HISTORY

The Agency filed its proposal with the Board on October 21, 1993. On November 4, 1993 the Board adopted the proposal for first notice. Publication occurred at 17 Ill. Reg. 20203, November 29, 1993.

Hearing was held on December 7, 1993 in Collinsville, Illinois. Testimony was presented by representatives of the Agency, the Illinois Petroleum Marketers Association (IPMA), the Illinois Association of Convenience Stores, Piasa Motor Fuels, Inc. (Piasa), Clinton County Oil Company, Inc., and the Illinois Petroleum Council.

The 45-day first-notice comment period closed on January 14, 1994. Comments were filed by the Department of Commerce and Community Affairs (DCCA) (PC #1), IPMA (PC #2), Administrative Code Division (PC #3), and the Agency (PC #4).

The Board adopted the repeal proposal for second notice on January 20, 1994. On February 15, 1994 the Joint Committee on Administrative Rules voted "no objection" to the proposal.

STAGE II/OBVR HISTORY

Stage II vapor recovery systems are designed to control and capture hydrocarbon vapors during the fueling of motor vehicle tanks. Vehicle fuel emissions consist of gasoline vapors displaced from the vehicle tank by dispensed liquid gasoline as the tank is filled. The Stage II system captures these vapors as they exit the vehicle's fuel fillpipe, thereby preventing escape of the vapors into the atmosphere. Vapor capture is accomplished by one of several types of devices attached to or part of the nozzle of the fuel dispensing system.

The Stage II regulations at issue occur at 35 Ill. Adm. Code 219.586. They were adopted by the Board in August 1992¹ in response to requirements of both the federal Clean Air Act and the Illinois Environmental Protection Act. In particular, the Clean Air Act requires that areas classified as "moderate ozone nonattainment areas" have Stage II regulations in place and submitted for approval to the USEPA by November 15, 1992. (42 USC 7511a(b)(3).) The Metro-East area is classified by the USEPA as a moderate ozone nonattainment area.

The Clean Air Act, however, does provide for a circumstance under which Stage II regulations are not required in moderate ozone nonattainment areas. That circumstance is that the USEPA promulgate regulations for on-board vapor recovery (OBVR) systems OBVR². State law also recognizes that Stage II regulations are not to be applied in moderate nonattainment areas if OBVR regulations are promulgated:

[Stage II] regulations shall apply only in areas of the State that are classified as moderate, serious, severe

¹ In the Matter of: Stage II Gasoline Vapor Recovery Rules: Amendments to 35 Ill. Adm. Code Parts 215, 218 and 219, R91-30, August 13, 1992. In addition to the Metro-East Stage II regulations, Stage II regulations for the Chicago ozone nonattainment area were also adopted in R91-30. The Chicago area regulations are not at issue today. The effective date of the R91-30 regulations was August 24, 1992.

² OBVR systems accomplish vapor recovery through devices built into the vehicle rather than into the fuel pump.

or extreme nonattainment areas for ozone pursuant to Section 181 of the federal Clean Air Act (42 USC 7511), but shall not apply to areas classified as moderate nonattainment areas for ozone if the Administrator of the U.S. Environmental Protection Agency promulgates standards for vehicle-based (onboard) systems for the control of vehicle refueling emissions pursuant to Section 202(a)(6) of the federal Clean Air Act (42 USC 7521(a)(6) by November 15, 1992. (415 ILCS 5/10, emphasis added)

The Clean Air Act specifies that USEPA was to promulgate the OBVR regulations by November 15, 1991. However, USEPA did not comply with this deadline, and had still not done so by November 15, 1992. On that date, accordingly, the State was required to implement Stage II because the alternative federal OBVR regulations did not exist.

Now, however, the OBVR regulations have been promulgated, and therefore the Clean Air Act requirement to employ Stage II controls in the Metro-East area no longer applies. Promulgation of the OBVR regulations has occurred as a result of a suit successfully brought against USEPA by the National Resources Defense Council (NRDC) and others (NRDC v. Reilly, No. 92-1137, D.C. Cir. Jan. 22, 1993). The court has found that USEPA did not have the discretion to forego promulgation of the OBVR regulations, and accordingly ordered USEPA to proceed with the regulations. The latest date for promulgation was set by consent decree for January 22, 1994. (See Exh. 1.) Today's action was initiated and pursued under the proposition that USEPA would timely meet this court-ordered deadline. Actual promulgation took place on January 24, 1994, the first working-day following January 22, 1994.

COSTS

The Agency observes, and the Board concurs, that absent repeal of the Stage II rules

... the specter is raised of a very large capital outlay in an economically depressed area of the State to satisfy a Clean Air Act requirement for only a very short period of time. Specifically, the Agency estimated that the capital outlay for installation of Stage II at the 400 area station would be approximately \$14 million. In January when the OBVR rules are promulgated, there is no longer a federal requirement for Stage II systems to be in place. (Agency Statement of Reasons at p.2)

The public hearing and subsequent public comments provided additional particulars regarding the economic burden of retaining the Stage II requirements.

The Agency observed that 377 facilities would be subject to Stage II control requirements in the Metro-East area absent the repeal, as follows (Tr. at 13):

Madison County	-	188
Monroe County	-	19
St. Clair County	-	170

The Agency also estimates that the capital cost of implementing Stage II would exceed \$8 million (Tr. at 13):

<u>Throughput</u> <u>(gal./month)</u>	<u>Number of</u> <u>Facilities</u>	<u>Capital Cost</u> <u>Per Facility</u>	<u>Total Cost</u> <u>By Size</u>
10,000 - 24,999	62	\$ 9,760	\$ 605,120
25,000 - 49,999	97	27,480	1,695,560
50,000 - 99,999	133	24,120	3,207,960
100,000 or more	<u>85</u>	36,710	<u>3,120,990³</u>
Totals	377		\$8,361,990 ³

The Agency estimates that installation costs for Stage II vapor recovery at a "typical" service station are approximately \$40,000.00. (Tr. at 17.) Piasa also has addressed the issue of installation costs, including a breakdown of the individual items and the ranges of costs associated with facilities of different sizes (Estimates prepared by Piasa Motor Fuels with help from Superior Equipment) (Exh. 3.):

COST ESTIMATE TO INSTALL STAGE II VAPOR RECOVERY
AT AN EXISTING LOCATION

	<u>4-6 Hose MPD</u> <u>24 Hoses</u>	<u>6-6 Hose MPD</u> <u>36 Hoses</u>
Nozzles, hoses, etc.		
OPW Nozzle	\$155	
Dayco Hose	105	
Whip Hose	44	
Breakaway	<u>96</u>	
	\$400	
	\$ 9,600	\$14,400
Labor to Retrofit Dispenses	4,000	6,000

³ These are the figures contained in the record. The Board believes that the figures are intended to be \$3,120,350 (85 x \$36,710) and \$8,628,990 (sum of last column), respectively. The differences are *de minimus* in the context of these estimates.

Underground Piping - Materials labor, excavation, paving	20,000	25,000
Vacuum Assist Kits \$3480/each	<u>13,920</u>	<u>20,880</u>
	\$47,520	\$66,280

Piasa states that estimating costs for retrofitting Stage II is difficult for a "typical" location, because every location and situation is different. (Id.)

In addition to installation costs, each facility would incur an annual operations cost. The Agency estimates that operations costs would average about \$7,000 per station per year. (Tr. at 17.) Piasa estimates that annual maintenance cost for hoses, nozzles, and bellows is in the range of \$150-\$200 per hose plus labor. (Exh. 3.)

No facilities to date have registered Stage II systems with the Agency or have applied for any associated construction and operating permits. Ten to 15 percent of the area retail stations have probably installed the underground vapor recovery lines during station upgrades in the past few years.

STATUTORY CONSIDERATIONS

The Board observed at first notice that the Act at Section 10 specifies that Stage II "... regulations ... shall not apply ... if [USEPA] ... promulgates [OBVR] standards ... by November 15, 1992" (see full quotation above). In light of this language, the Board at first notice asked interested persons to comment on whether USEPA's failure to promulgate OBVR regulations by November 15, 1992 constitutes an impediment to the Board's moving forward with repeal of the Metro-East Stage II regulations.

At hearing, the Agency observed that in promulgating the Stage II regulations in 1992 the State was acting in accord with the requirements of the Clean Air Act. The Agency further observes that in now repealing Stage II in the Metro-East moderate nonattainment area, the State would be continuing to act in accord with the Clean Air Act, the Court's order and the consent decree in NRDC v. Reilly, and the clear legislative intent of implementing Stage II only if OBVR regulations were not in place. (Tr. at 37.) (See also PC #4 at ¶1.) Other participants at hearing agreed that the timeframes in the state legislation were intended to be consistent with the federal requirements. (Tr. at 35, 36, 20.) IPMA also stated that it believes that the current language in the statute is not an impediment to the current action to repeal the Stage II requirements (Tr. at 35.) IPMA further states that the legislative history of SB 1241 (see full quotation of 415 ILCS 5/10, above) which changed the requirements for Stage II vapor

recovery was intended to bring the State into conformance with, but to be no more stringent than, the requirements of the federal CAA. (PC #2 at 9.)

ENVIRONMENTAL CONSIDERATIONS

OBVR is intended to control essentially the same emissions as is Stage II. (Tr. at 11.) Accordingly, in the presence of OBVR, Stage II promises to produce little, if any, enhancement of environmental quality. As the Agency observes:

These Stage II systems would provide redundant control when onboard canisters are present, and would provide little additional vapor recovery at great cost. (Tr. at 14.)

Although implementation of OBVR will require some phase-in time, the State can and will, in the moderate non-attainment area of the Metro-East, achieve its goals reducing VOM emissions by controls far less costly than Stage II. (Tr. at 31-4.)

CONCLUSION

Based on consideration of the statutory, economic, and environmental basis for Stage II in the Metro-East area, the Board believes that it is necessary that the Stage II vapor recovery rules be repealed. The rules requiring Stage II vapor recovery are not required by federal law, are contrary (in the presence of OBVR rules) to the intent of State law, are not economically reasonable, and produce no significant environmental improvement over that afforded by OBVR.

ORDER

The Board directs the Clerk of the Board to submit the text of the following amendments to the Secretary of State for final notice pursuant to Section 6 of the Illinois Administrative Procedure Act.

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSIONS STANDARDS AND LIMITATIONS
FOR STATIONARY SOURCES

PART 219
ORGANIC MATERIAL EMISSION STANDARDS AND LIMITATIONS
FOR THE METRO EAST AREA

SUBPART Y: GASOLINE DISTRIBUTION

Section
219.581 Bulk Gasoline Plants

- 219.582 Bulk Gasoline Terminals
- 219.583 Gasoline Dispensing Facilities - Storage Tank Filling Operations
- 219.584 Gasoline Delivery Vessels
- 219.585 Gasoline Volatility Standards
- 219.586 Gasoline Dispensing Operations - Motor Vehicle Fueling Operations (Repealed)

AUTHORITY: Implementing Section 10 and authorized by Section 28.5 of the Environmental Protection Act (Ill. Rev. Stat. 1991, ch. 111½, par. 1010) (P.A. 87-1213, effective September 26, 1992) [415 ILCS 5/10 and 28.5].

SOURCE: Adopted at R91-8 at 15 Ill. Reg. 12491, effective August 16, 1991; amended in R91-24 at 16 Ill. Reg. 13597, effective August 24, 1992; amended in R91-30 at 16 Ill. Reg. 13883, effective August 24, 1992; emergency amendment in R93-12 at Ill. Reg. 8295, effective May 24, 1993, for a maximum of 150 days, amended in R93-9 at 17 Ill. Reg. 16918, effective September 27, 1993 and October 21, 1993; amended in R93-28 at 18 Ill. Reg. _____, effective _____.

SUBPART Y: GASOLINE DISTRIBUTION

Section 219.586 Gasoline Dispensing Operations - Motor Vehicle Fueling Operations (Repealed)

- a) For the purposes of this Section, the following definitions apply.
 - 1) Average monthly volume means the amount of motor vehicle fuel dispensed per month from a gasoline dispensing operation based upon a monthly average for the 2-year period of November, 1990 through October, 1992 or, if not available, the monthly average for the most recent twelve calendar months. Monthly averages are to include only those months when the operation was operating.
 - 2) Certified means any vapor collection and control system which has been tested and approved by CARB as having a vapor recovery and removal efficiency of at least 95% (by weight) shall constitute a certified vapor collection and control system. CARB testing and approval is pursuant to the CARB manual, incorporated by reference at 219.112 of this Part.
 - 3) Completion of installation means the successful passing of one or more of the following tests applicable to the installed vapor collection and control system: Dynamic Backpressure Test, Pressure Decay/Leak Test, and Liquid Blockage

Test, incorporated by reference at 219.112 of this Part.

- 4) Constructed means fabricated, erected or installed; refers to any facility, emission source or air pollution control equipment.
- 5) CARB means California Air Resources Board, P.O. Box 2815, Sacramento, CA 95812.
- 6) Employee means any person who performs work for an employer.
- 7) Operation means any building, structure, installation, operation or combination thereof located on contiguous properties and under common ownership that provides for the dispensing of motor vehicle fuel.
- 8) Gasoline dispensing operation means any operation where motor vehicle fuel is dispensed into motor vehicle fuel tanks or portable containers from a storage tank with a capacity of 2176 liters (575 gallons) or more.
- 9) Modification means any change, removal or addition, other than an identical replacement, of any component contained within the vapor collection and control system.
- 10) Motor vehicle means any self-propelled vehicle powered by an internal combustion engine including, but not limited to, automobiles and trucks. Specifically excluded from this definition are watercraft and aircraft.
- 11) Motor vehicle fuel means any petroleum distillate having a Reid vapor pressure of more than 27.6 kilopascals (kPa) (four pounds per square inch) and which is used to power motor vehicles.
- 12) Owner or operator means any person who owns, leases, operates, manages, supervises or controls (directly or indirectly) a gasoline dispensing operation.
- 13) Reid vapor pressure for gasoline, shall be measured in accordance with either the method ASTM D323 or a modification of ASTM D323 known as the "dry method" as set forth in 40 CFR 80, Appendix E, incorporated by references in 35 Ill. Adm. Code 219.112 of this Part.

- 14) Vapor collection and control system means any system certified by CARB which limits the discharge to the atmosphere of motor vehicle fuel vapors displaced during the dispensing of motor vehicle fuel into motor vehicle fuel tanks.
- b) The provisions of subsection (c) below shall apply to any gasoline dispensing operation which dispenses an average monthly volume of more than 10,000 gallons of motor vehicle fuel per month. Compliance shall be demonstrated in accordance with the schedule provided in subsection (d) below.
- c) No owner or operator of a gasoline dispensing operation subject to the requirements of subsection (b) above shall cause or allow the dispensing of motor vehicle fuel at any time from a motor fuel dispenser unless the dispenser is equipped with and utilizes a vapor collection and control system which is properly installed and operated as provided below:
 - 1) Any vapor collection and control system installed, used or maintained has been CARB certified.
 - 2) Any vapor collection and control system utilized is maintained in accordance with the manufacturer's specifications and the certification.
 - 3) No elements or components of a vapor collection and control system are modified, removed, replaced or otherwise rendered inoperative in a manner which prevents the system from performing in accordance with its certification and design specifications.
 - 4) A vapor collection and control system has no defective, malfunctioning or missing components.
 - 5) Operators and employees of the gasoline dispensing operation are trained and instructed in the proper operation and maintenance of a vapor collection and control system.
 - 6) Instructions are posted in a conspicuous and visible place within the motor fuel dispensing area and describe the proper method of dispensing motor vehicle fuel with the use of the vapor collection and control system.
- d) In conjunction with the compliance provisions of Section 219.105 of this Part, operations subject to the

requirements of subsection (c) above shall demonstrate compliance according to the following:

- 1) Operations that commenced construction after November 1, 1990, must comply by May 1, 1993.

[BOARD NOTE: The Board adopted an emergency rule in R93-12, extending the compliance date in Section 219.586(d)(1) from May 1, 1993 to October 15, 1993. This emergency rule became effective on May 24, 1993 and will expire on October 21, 1993.]
- 2) Operations that commenced construction before November 1, 1990, and dispense an average monthly volume of more than 100,000 gallons of motor fuel per month must comply by November 1, 1993.
- 3) Operations that commenced construction before November 1, 1990, and dispense an average monthly volume of less than 100,000 gallons of motor fuel per month must comply by November 1, 1994.
- 4) New operations constructed after the adoption of this Section shall comply with the requirements of subsection (c) above upon startup of the operation.
- 5) Existing operations previously exempted from but which become subject to the requirements of subsection (c) above after May 1, 1993 shall comply with the requirements of subsection (c) above within six calendar months of the date from which the operation becomes subject.
- e) Any gasoline dispensing operation that becomes subject to the provisions of subsection (c) above at any time shall remain subject to the provisions of subsection (c) above at all times.
- f) Upon request by the Agency, the owner or operator of a gasoline dispensing operation which claims to be exempt from the requirements of this Section shall submit records to the Agency within 30 calendar days from the date of the request which demonstrate that the gasoline dispensing operation is in fact exempt.
- g) Recordkeeping and reporting:
 - 1) Any gasoline dispensing operation subject to subsection (c) above shall retain at the operation copies of the registration information required at subsection (h) below.

- 2) Records and reports required pursuant to this subsection shall be made available to the Agency upon request. Records and reports which shall be maintained by the owner or operator of the gasoline dispensing operation shall clearly demonstrate:
 - A) That a certified vapor collection and control system has been installed and tested to verify its performance according to its specifications.
 - B) That proper maintenance has been conducted in accordance with the manufacturer's specifications and requirements.
 - C) The time period and duration of all malfunctions of the vapor collection and control system.
 - D) The motor vehicle fuel throughput of the operation for each calendar month of the previous year.
 - E) That operators and employees are trained and instructed in the proper operation and maintenance of the vapor collection and control system and informed as to the potential penalties associated with the violation of any provision of this Section.
- h) Any gasoline dispensing operation subject to subsection (c) above shall be exempt from the permit requirements specified under 35 Ill. Adm. Code 201.142, 201.143 and 201.144 for its vapor collection and control systems, provided that:
 - 1) Upon the installation of a vapor collection and control system, the owner or operator of the gasoline dispensing operation submits to the Agency a registration which provides at minimum the operation name and address, signature of the owner or operator, the CARB Executive Order Number for the vapor collection and control system to be utilized, the number of nozzles (excluding diesel or kerosene) used for motor vehicle refueling, the monthly average volume of motor vehicle fuel dispensed, the location (including contact person's name, address, and telephone number) of records and reports required by this Section, and the date of completion of installation of the vapor collection and control system.

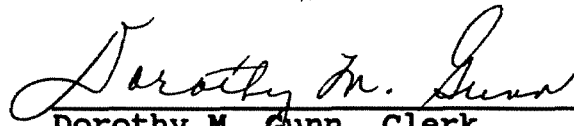
- 2) The registration is submitted to the Agency within 30 days of completion of such installation.
- 3) A copy of the registration information is maintained at the gasoline dispensing operation.
- 4) Upon the modification of an existing vapor collection and control system, the owner or operator of the gasoline dispensing operation submits to the Agency a registration that details the changes to the information provided in the previous registration of the vapor collection and control system and which includes the signature of the owner or operator. The registration must be submitted to the Agency within 30 days of completion of such modification.

(Source: Repealed at 18 Ill. Reg. _____, effective _____)

IT IS SO ORDERED.

Board Member J. Theodore Meyer concurred.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 17th day of February, 1994, by a vote of 6-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board