

ILLINOIS POLLUTION CONTROL BOARD
January 21, 2021

IN THE MATTER OF:)
)
PROPOSED NEW 35 ILL. ADM. CODE 249) R20-18
ETHYLENE OXIDE AMBIENT AIR) (Rulemaking - Air)
MONITORING)

Adopted Rule. Final Order.

OPINION AND ORDER OF THE BOARD (by J. Van Wie):

The Illinois Environmental Protection Agency (IEPA or the Agency) filed a proposal to add a new part to the Board's air pollution regulations. The proposed rules address IEPA's air monitoring for ambient levels of ethylene oxide (EtO) across Illinois, which will supplement the air monitoring being conducted by the United States Environmental Protection Agency (USEPA). IEPA's air monitoring and these rules for carrying it out are required by Section 9.16(n) of the Environmental Protection Act (Act) (415 ILCS 5/9.16(n), added by P.A. 101-22 (eff. June 21, 2019)).

The Board's first notice accepted IEPA's proposal for hearing without commenting on the proposal's substantive merits. The second notice opinion reviewed the rulemaking record and discussed proposed changes. Rather than reproduce those sections here, the Board recommends that readers wishing to review them consult that opinion dated November 19, 2020. The opinion can be viewed from the Clerk's Office On-Line (COOL) on the Board's website (pcb.illinois.gov) under this docket number R20-18.

Today, the Board adopts final rules. This opinion begins by providing an abbreviated procedural history of the rulemaking. After that, the Board discusses late public comments received while these rules were pending before the Joint Committee on Administrative Rules (JCAR). The Board then addresses the rules' economic reasonableness and technical feasibility. After concluding to adopt these rules as final and inserting the effective date of January 21, 2021 into Parts 249.110(b) and 120, the Board directs the Clerk to submit the rules to the Secretary of State for publication in the *Illinois Register*. The adopted rules are in the order following the opinion.

ABBREVIATED PROCEDURAL HISTORY

On December 17, 2019, IEPA filed a proposal to add a new Part 250 to the Board's air pollution regulations. Accompanying the proposal were documents including a Statement of Reasons (SR) and Technical Support Document (TSD).

On January 16, 2020, the Board issued a first-notice order accepting IEPA's proposal for hearing without commenting on the substantive merits of the proposal. As explained in the order, the Board proposed the new rules as Part 249 instead of Part 250. The proposed first-

notice rules were published in the *Illinois Register* on January 31, 2020 (44 Ill.Reg. 2216 (Jan. 31, 2020)).

On January 16, 2020, the Board requested that the Department of Commerce and Economic Opportunity (DCEO) conduct an economic impact study on the proposed rules. On March 3, 2020, DCEO issued a letter in response to the request, declining to undertake the economic impact study (DCEO Ltr.).

On February 27, 2020, IEPA filed the testimony of David Bloomberg, manager of IEPA's Air Quality Planning Section. On March 12, 2020, the hearing officer issued an order with the Board's prefiled questions for IEPA. On June 24, 2020, IEPA filed its responses to the Board's prefiled questions.

On March 16, 2020 and April 24, 2020, the hearings were cancelled due to the COVID-19 pandemic; they were rescheduled by orders of May 18, 2020 and July 28, 2020. Public notice of the rescheduled hearings appeared in 11 newspapers across Illinois.

On June 25, 2020 and September 10, 2020, the Board held hearings by video conference between its Chicago and Springfield Offices. In addition, because of the COVID-19 pandemic, the Board allowed remote participation by computer or telephone using WebEx. IEPA witnesses were available to testify at both hearings. No other testimony or public comment was offered at either hearing.

The hearing officer admitted all three hearing exhibits into the record at the first hearing: Mr. Bloomberg's prefiled testimony of February 27, 2020 (Exh. 1), which was entered into the record as if read; the Board's March 12, 2020 prefiled questions for IEPA (Exh. 2); and IEPA's June 24, 2020 responses to the Board's prefiled questions (Exh. 3).

On September 10, 2020, the final date for public comments was set at October 1, 2020.

On October 1, 2020, IEPA filed its comments (PC 1). No other public comments were filed with the Board by that date.

On November 19, 2020, the Board issued its second-notice opinion, placing the proposed rules before JCAR.

On December 14, 2020, nearly 10 weeks after the October 1, 2020 close of the public comment period, the advocacy group Stop EtO filed a public comment (PC 2). On December 16, 2020, the Board docketed as a public comment an email between Board staff and JCAR staff, including questions posed by JCAR staff (PC 3). On December 30, 2020, the Board docketed as a public comment an email exchange between Board staff and JCAR staff in which JCAR staff posed more questions and forwarded additional comments from Stop EtO (PC 4). On January 8, 2021, the Board docketed an IEPA email to JCAR staff as a public comment (PC 5).

On December 15, 2020, JCAR, with the Board's concurrence, voted to extend for an additional 45 days the second notice period. At its meeting on January 12, 2021, JCAR issued a certification of no objection to this rulemaking.

LATE PUBLIC COMMENTS

The Illinois Administrative Procedure Act provides that “[a]fter commencement of the second notice period, no substantive change may be made to a proposed rulemaking unless it is made in response to an objection or suggestion of the Joint Committee.” 5 ILCS 100/5-40(c) (2018). During the second notice period, Stop EtO filed comments with the Board, seeking substantive changes to the proposed rules, which the Board forwarded to JCAR. At JCAR's request, IEPA provided comments responsive to Stop EtO. IEPA maintained that Stop EtO's comments warranted no changes to the proposed rules. The Board summarizes both sets of comments below. But, because JCAR requested no action on Stop EtO's comments, the Board takes no action on those comments and will proceed to final adoption.

Stop EtO Public Comment

Stop EtO identifies two issues in its comments. First, Stop EtO raises concerns that three of the sample locations are too close to EtO emission sources. Second, Stop EtO suggests that “a full year of testing is preferable in order to calculate background EtO levels during all seasons.” PC 2 at 4.

Specifically, Stop EtO recommends that Northbrook, Schiller Park, and Alton be excluded from the list of locations for the EtO ambient air monitoring future IL EPA study. PC 2 at 2-3. Stop EtO argues against using Northbrook as a sampling location because it is located near two highways and three hospitals. *Id.* Stop EtO further claims that “Northbrook is already known to have elevated EtO ambient levels from a US EPA 6-month long air monitoring study, which found an average of 0.294 µg/m³.”¹ *Id.* at 3. Stop EtO argues against using Schiller Park as a sampling location because it is adjacent to O'Hare International Airport, borders a higher cancer area,² and contains an area of “industrial facilities.” *Id.* Stop EtO argues against using Alton as a sampling location “if St. Anthony's Hospital is currently emitting ethylene oxide in the air.”³ *Id.* Stop EtO recommends replacing Northbrook, Schiller Park, and Alton with IEPA facilities in Zion, Lisle, and Lawndale. *Id.* at 4. Stop EtO further states that the AERMOD model that IEPA uses to estimate EtO disbursement “greatly underestimates the impact of EtO

¹ PC 2 at 3, citing USEPA. Ethylene Oxide Ambient Concentrations at National Air Toxics Trends Stations and Urban Air Toxics Monitoring Program stations October 1, 2018 - March 31, 2019.

https://www.epa.gov/sites/production/files/2019-11/documents/data_summary_stations.pdf

² PC 2 at 3, citing USEPA, National Air Toxics Assessment (NATA) 2014 map.

<https://gispub.epa.gov/NATA/>

³ Stop EtO states that St. Anthony's Hospital in Alton self-reported 100 pounds of EtO emissions to the Toxics Release Inventory (TRI) databases in 2014. PC 2 at 3.

around [EtO emitters].” PC 4 at 2. Additionally, Stop EtO provides a PowerPoint presentation that Stop EtO states was a part of the talk it gave to USEPA Region 5 and IEPA scientists and engineers in April 2020. PC 4 at 2-43.

Second, Stop EtO asks that testing be conducted over a full year, rather than over a six-month period. PC 2 at 4. Stop EtO further argues that because “ambient background testing done primarily in winter months - when EtO levels are typically higher - will artificially skew the background levels,” the testing period “should cover as wide a range of seasonality as possible.” *Id.*

IEPA Responsive Comment

IEPA states that Stop EtO’s comments were not timely provided to the Board or IEPA. PC 5 at 1. IEPA notes that, prior to filing the rulemaking with the Board, IEPA expressly reached out by both phone and e-mail to Stop EtO through Nancy Loeb with the Bluhm Legal Clinic. *Id.* IEPA also sent a draft copy of the rules to Ms. Loeb, who replied with comments on December 9, 2019, stating, “I am writing these comments on behalf of Stop EtO in Lake County.” *Id.* IEPA further states that, while Stop EtO was aware that the rulemaking was about to be filed, it did not file testimony, participate in either of the two hearings, or provide public comment during the first notice. *Id.*

IEPA offers five responses to Stop EtO’s arguments against the proposed monitoring sites in Northbrook, Schiller Park, and Alton. First, IEPA states that it selected its monitoring locations to provide a “diverse cross section of locations.” PC 5at 4. IEPA explains that it “specifically avoided recommending ambient monitor placements near permitted sources of EtO, and also avoided major highways as much as possible, while also taking into account the fact that many Illinoisans live near such transportation arteries and thus cannot be ignored when selecting sites.” *Id.*

Second, IEPA asserts that because EtO is a localized pollutant, which begins to disperse as soon as it is emitted, the proposed monitoring locations are far enough away from known EtO emitters to prevent artificially high measurements of background EtO. PC 5 at 2. IEPA previously analyzed EtO dispersion modeling, finding that emissions could not be differentiated from background levels around or less than one kilometer from the source. *Id.*

Third, IEPA states that AERMOD “is the state-of-the-art model, approved by the USEPA.” PC 5 at 2. Moreover, according to IEPA, the two models that Stop EtO proposes to be used instead of AERMOD are inappropriate. *Id.* RLINE is still under development and USEPA states that it “is not appropriate for regulatory applications.” *Id.* CALPUFF is only recommended to be used for “far-field emission levels,” which “would be on the order of 50 kilometers.” *Id.* at 3.

Fourth, IEPA states that the three sites are appropriate to satisfy the General Assembly’s directive to “determine the ambient levels of [EtO] throughout the State.” PC 5 at 5. The Northbrook and Schiller Park sites already monitor hazardous air pollutants, are not affected by any nearby permitted EtO emitters, and are appropriate to obtain ambient EtO levels in urban

areas. *Id.* The Alton site increases the geographic spread of monitors throughout the State and St. Anthony’s hospital no longer uses or emits EtO. *Id.*

Finally, IEPA contends that none of the alternate sites proposed by Stop EtO are appropriate. PC 5 at 6. Lisle has limited space and potential electrical capacity issues. *Id.* Lawndale is not owned by the State, IEPA staff do not have routine access, and it is unclear if there is adequate space or electrical capacity. *Id.* Zion is redundant of Bondville and Nilwood, and would require “significant additional travel for [IEPA] monitoring staff. *Id.*

Conclusion on Comments

Stop EtO had ample opportunity to provide analysis and feedback on the proposed rules during the first notice period but did not do so. As stated above, once the second notice period began on November 20, 2020, the Board could make no substantive change to the proposed rules except in response to JCAR objection or suggestion (5 ILCS 100/5-40(c) (2018)). On January 12, 2021, JCAR issued a certification of no objection to the rules as proposed by the Board. Therefore, the Board cannot make any of the rule changes requested by Stop EtO. Moreover, IEPA’s response adequately addresses the issues raised by Stop EtO.

ECONOMIC REASONABLENESS AND TECHNICAL FEASIBILITY

Economic Impact Study

As required by Section 27(b) of the Act (415 ILCS 5/27(b) (2018)), the Board requested that DCEO conduct an economic impact study of the proposed rules. DCEO issued a letter declining to do so, stating that “[t]he proposed rule will not have any economic impact as the rule will not alter any restrictions, requirements, or incentives for Illinois residents or businesses.” DCEO Ltr. at 1.

Affected Facilities

The air sampling locations in Northbrook, Schiller Park, Alton, Nilwood, and Bondville are currently in use by IEPA’s Air Quality Planning Section for other ambient air monitoring. Exh. 1 at 2. IEPA does not identify any other affected facilities.

Technical Feasibility

IEPA stated that it is the only entity required to act under these rules. Exh. 3 at 5. Further, IEPA is “already familiar with all applicable quality assurance protocols.” *Id.* at 5. Accordingly, the Board concludes that its adopted rules are technically feasible.

Economic Reasonableness

According to IEPA, the rules “can be implemented without economic burden to any entity in the State except for [IEPA].” TSD at 8. IEPA estimated that it will cost approximately \$34,000 to implement these EtO ambient air monitoring requirements. Exh. 3 at 6. IEPA stated

that the costs associated with the monitoring requirements are reasonable to meet the requirements of the Act. TSD at 9. In its second-notice opinion, the Board found “that the proposed rules will not have an adverse economic effect on the people of the State of Illinois.” There were no proposed second-notice changes. Accordingly, the Board concludes that its adopted rules are economically reasonable.

CONCLUSION

The Board revises its air pollution rules by adding a new Part 249 to comply with the requirements of Section 9.16(n) of the Act. The adopted rules appear in the order below.

ORDER

The Board directs the Clerk to submit its adopted rules to the Secretary to State for publication in the *Illinois Register*. Additions since second notice appear underlined and deletions since second notice appear struck through.

Title 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER m: MONITORING REQUIREMENTS

PART 249
ETHYLENE OXIDE AMBIENT AIR MONITORING

Section	
249.100	Purpose
249.105	Monitoring Locations
249.110	Ethylene Oxide Ambient Air Monitoring Requirements
249.115	Monitoring Results
249.120	Sunset Provisions

AUTHORITY: Implementing Section 9.16, and authorized by Sections 27 and 28, of the Environmental Protection Act [415 ILCS 5/9.16, 27, and 28].

SOURCE: Adopted in R20-18 at 44 Ill. Reg. _____, effective _____.

Section 249.100 Purpose

The purpose of this Part is to set forth the manner in which the Agency must conduct ambient air monitoring of ethylene oxide in accordance with the requirements in Section 9.16 of the Environmental Protection Act [415 ILCS 5/9.16].

Section 249.105 Monitoring Locations

The Agency must monitor ethylene oxide levels in the ambient air in or around the following locations in Illinois under the requirements of Section 249.110:

- a) Northbrook;
- b) Schiller Park;
- c) Nilwood;
- d) Alton; and
- e) Bondville.

Section 249.110 Ethylene Oxide Ambient Air Monitoring Requirements

- a) The Agency must conduct ambient air monitoring for ethylene oxide in or around each location specified in Section 249.105 for a period of six consecutive calendar months. During that time frame, the Agency must collect a sample every 12 days. Each sample must be collected over a period of approximately 24 hours.
- b) The six-month monitoring period must commence no later than one year after January 25, 2021 ~~the effective date of this Part.~~
- c) The Agency must comply with all applicable USEPA regulations and guidelines for ambient air monitoring.

Section 249.115 Monitoring Results

The Agency must make the ethylene oxide ambient air monitoring results publicly available on the Agency's website within 30 days after receipt of each set of quality assured data.

Section 249.120 Sunset Provisions

The provisions of this Part will no longer apply 24 months after January 25, 2021 ~~the effective date of this Part.~~

IT IS SO ORDERED.

Section 41(a) of the Environmental Protection Act provides that final Board orders may be appealed directly to the Illinois Appellate Court within 35 days after the Board serves the order. 415 ILCS 5/41(a) (2018); see also 35 Ill. Adm. Code 101.300(d)(2), 101.906, 102.706. Illinois Supreme Court Rule 335 establishes filing requirements that apply when the Illinois Appellate Court, by statute, directly reviews administrative orders. 172 Ill. 2d R. 335. The

Board's procedural rules provide that motions for the Board to reconsider or modify its final orders may be filed with the Board within 35 days after the order is received. 35 Ill. Adm. Code 101.520; see also 35 Ill. Adm. Code 101.902, 102.700, 102.702.

I, Don A. Brown, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on January 21, 2021, by a vote of 4-0.

A handwritten signature in cursive script that reads "Don A. Brown". The signature is written in black ink and is positioned above a horizontal line.

Don A. Brown, Clerk
Illinois Pollution Control Board