2016 IL App (3d) 150526

Opinion filed September 2, 2016

IN THE

APPELLATE COURT OF ILLINOIS

THIRD DISTRICT

2016

EMERALD PERFORMANCE)	Petition for Review of an
MATERIALS, LLC,)	Order of the Illinois Pollution
)	Control Board
Petitioner-Appellant,)	
)	Appeal No. 3-15-0526
v.)	PCB No. AS 13-2
)	
THE ILLINOIS POLLUTION CONTROL)	
BOARD and THE ILLINOIS)	
ENVIRONMENTAL PROTECTION)	
AGENCY,)	
)	
Respondents-Appellees.)	

PRESIDING JUSTICE O'BRIEN delivered the judgment of the court, with opinion. Justices Holdridge and Schmidt concurred in the judgment and opinion.

OPINION

Petitioner Emerald Performance Materials (Emerald) filed a petition seeking an adjustment from standards imposed by respondent Pollution Control Board (the Board) regarding emissions from Emerald's manufacturing plant and water treatment facility located in Henry, in Marshall County. The Board granted the adjusted standard with various conditions. Emerald appealed the conditions. Respondent Illinois Environmental Protection Agency (IEPA) joins the Board in defending the conditions. We affirm in part, reverse in part, and remand.

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¶ 2 FACTS

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Petitioner Emerald Performance Materials filed a petition for an adjusted standard with respondent Pollution Control Board seeking an adjustment from respondent Illinois Environmental Protection Agency's ammonia effluent limitations set forth in section 304.122(b) of the Illinois Administrative Code (Code) (35 Ill. Adm. Code 304.122(b) (2002)). Emerald owns and operates a specialty chemical facility in Henry. The Emerald plant and a neighboring polyvinyl chloride (PVC) resin manufacturing plant were opened and operated by B.F. Goodrich from 1958 to 1993. Goodrich sold the PVC resin plant in 1993, and it was eventually bought by Mexichem Specialty Resins, Inc. Goodrich sold the specialty chemical facility to Noveon, Inc., in 2001, and Emerald bought it in 2006. The plant produces accelerators and antioxidants.

Emerald operates a wastewater treatment plant to process the wastewater from its operations. It also processes Mexichem's wastewater. After treatment, the wastewater is eventually discharged into the Illinois River. The discharge exceeds the allowable total ammonia nitrogen effluent level of 3 mg/L, as set forth in section 304.122(b) of the Code (35 Ill. Adm. Code 304.122(b) (2002). Neither Emerald nor Mexichem uses ammonia as a raw material in their processes, but they do use amines, which serve as precursors to the formation of ammonia nitrogen. In addition, Emerald uses mercaptobenzothiasole (MBT) as a key intermediate in the production of accelerators. The MBT that is present in the wastewater when it enters the treatment plant inhibits the nitrification process through which ammonia would otherwise be oxidized to nitrates. Emerald is the only remaining manufacturer of MBT in the United States.

The ammonia nitrogen that is discharged into the Illinois River is formed in the wastewater treatment process. The wastewater is discharged into the river through a high-rate multi-port diffuser. The plant is situated on a bluff 80 to 90 feet above the river, and the velocity

with which the wastewater discharge enters the river through the diffuser causes rapid and immediate mixing. The treatment plant provides greater than 95% biological oxygen demand reduction. The ammonia nitrogen levels discharged into the river are generally in the range of 23 to 150 mg/L.

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In 1991, when Goodrich renewed its National Pollutant Discharge Elimination System (NPDES) permit, the permit included a new ammonia effluent limitation (35 Ill. Adm. Code 304.122(b), amended at 14 Ill. Reg. 6777 (eff. Apr. 24, 1990)). Goodrich appealed the ammonia standard, and the parties agreed the best avenue would be for Goodrich to seek a variance. In 1992, Goodrich applied for a variance, and the request was stayed while Goodrich researched various technologies to reduce ammonia in its discharge. The research conducted by Goodrich, and then Noveon, concluded in 1998 that the available treatment technologies were neither economically reasonable nor technically feasible to significantly reduce the ammonia in the discharge so as to comply with section 304.122(b) requirements.

Because a variance requires eventual compliance with the standard, Noveon filed a petition for an adjusted standard in 2002. Following hearings, the Board determined that Noveon qualified for an adjusted standard under the statutory factors, and in November 2004, it granted Noveon's petition, with conditions. In granting the petition, the Board found that the wastewater discharge from the treatment plant was fundamentally different from other industrial dischargers required to meet the standards in section 304.122(b); the reason the wastewater differed was because the MBT used in the processes inhibited nitrification of the ammonia in the wastewater treatment system; eleven alternative technologies reviewed by Noveon revealed none of them was both economically reasonable and technically feasible to control and/or reduce ammonia in

the discharge; and there was no adverse environmental impact on the Illinois River from the ammonia effluent discharge.

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The conditions imposed by the Board in the 2004 adjusted standard included a discharge limit of not more than a total ammonia nitrogen concentration of 155 mg/L and a seven-year sunset provision; and the requirements that Noveon install a multi-port diffuser; continue to investigate alternative production methods and technologies to lessen the ammonia discharge and submit an annual report to the IEPA setting forth the results of the investigations; research and propose ways to provide environmental improvements to the Illinois River in Marshall County, a factor the Board stated it might use in considering a future request to renew the adjusted standard; provide quarterly monitoring of ammonia nitrogen to demonstrate compliance with ammonia water quality standards; and comply with the Clean Air Act (42 U.S.C. § 7401 et seq. (2000)), NPDES permit program, and the Board water pollution regulations.

After it purchased the facility in 2006, Emerald engaged in a number of projects and investigations to facilitate the reduction of the ammonia effluent, including the installation of the multi-port diffuser. Emerald also conducted studies and samplings to demonstrate its discharge did not negatively impact the environment. Testing done quarterly from 2007 to 2012 established the ammonia levels complied with the acute and chronic water quality standards for ammonia nitrogen, with the exceptions of three exceedances. In 2011 and 2012, Emerald collected effluent samples to test its toxicity to aquatic organisms. The results indicated that Emerald's effluent met the toxicity limits and its dilution rates were in compliance with water quality regulations.

Emerald filed the instant petition for an adjusted standard in September 2012, seeking to renew the adjusted standard of 155 mg/L for ammonia granted to Noveon. Emerald proposed it maintain the same standard and continue to use the multi-port diffuser. Although IEPA urged the

Board to deny the petition for an adjusted standard, in June 2014, Emerald and IEPA jointly submitted agreed recommended conditions, including the following: (1) limiting ammonia nitrogen effluent to a daily maximum of 140 mg/L, (2) requiring Emerald to investigate new treatment technologies and evaluate implementation of new and existing technologies, and (3) terminating the adjusted standard in ten years.

Noveon's petition for an adjusted standard. The Board acknowledged the treatment alternatives submitted with the 2002 Noveon petition and the findings of Brown and Caldwell, an environmental consulting firm, that there were no economically feasible treatment alternatives that would reliably reduce the concentration of effluent ammonia nitrogen. Emerald hired Brown and Caldwell to assist in its 2012 petition by revisiting its previous work, investigating what, if any, changes and new technologies had occurred since then, and determining whether its prior conclusions remained valid. Brown and Caldwell reviewed the previously considered alternatives and investigated five new ones. Brown and Caldwell concluded the new technologies to reduce ammonia would not be as effective or economically viable as the previously considered options, which were found neither technologically feasible nor economically reasonable.

IEPA recommended to the Board that it reject Emerald's petition for an adjusted standard. IEPA asserted that Emerald did not meet its burden to establish that the adjusted standard would not cause environmental or health harm substantially and significantly more adverse than those under the general regulations, citing studies noting the possible toxicity of ammonia to mollusks. According to IEPA, the information indicated that the effluent discharged by Emerald could be harming Illinois River mollusks. IEPA also asserted Emerald could

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substantially reduce ammonia at a reasonable cost. Other concerns raised by IEPA included Emerald's failure to explore alternatives. IEPA proposed a 48% reduction in the ammonia effluent limit from 155 mg/L to 80 mg/L, if the Board granted the petition.

Improvements to the Illinois River" and had no plans to invest in any environmentally beneficial improvements. Emerald indicated it would not likely "consider cost-share incentives to implement or install best management practices (BMPs) for an environmental project." Project costs, debt obligations, a workforce lockout, and the economic downturn limited the funds Emerald had for such projects. Emerald submitted that its funds would be more efficiently spent continuing to investigate new technologies and production methods. In addition, Emerald replied that it did not identify any BMPs that would be economically feasible or have tangible environmental benefits.

¶ 14 The Board also asked about a seven-year sunset provision. Emerald responded that it could accept a sunset provision rather than a denial of its petition for an adjusted standard, but it believed that an ongoing evaluation of new treatment technologies and production methods would better ensure the best degree of treatment than the imposition of a sunset provision.

¶ 15 The Board issued its order in April 2015, finding that Emerald met the requirements for an adjusted standard and setting the standard at 140 mg/L, with a five-year sunset provision. Several conditions were included in the order:

- a. continued use of the high-rate, multi-port diffuser for discharge;
- b. maintain various ammonia reduction measures, including using

ammonia reduction as a metric in the employee gain sharing plan;

- c. investigate new production methods and technologies to generate less ammonia and nitrification inhibitors in the discharge;
- d. investigate new treatment technologies and evaluate the implementation of new and existing treatment technologies;
- e. investigate and submit to IEPA three specific studies, including the use of a spray irrigation program;
- f. submit annual reports summarizing its activities regarding the conditions;
- g. IEPA may petition the Board for a modified standard if the new technologies are economically reasonable and technically feasible;
- h. to seek renewal or modification of the adjusted standard, implementing agricultural BMPs within the Illinois River-Senachwine Lake Watershed to provide a partial reduction in the total nitrogen loading to the watershed by offsetting at least 45% of the nitrogen represented in 841 lbs/day ammonia nitrogen based on the 30-day average load limit, and;
- i. operate in compliance with the Clean Air Act, its NPDES permit; the Board water pollution regulations; and any other applicable requirements.
- In setting forth the condition requiring an agricultural BMPs offset, the Board discussed a draft document, entitled "Illinois Nutrient Loss Reduction Strategy" (Nutrient Strategy), that was issued by IEPA and the Illinois Department of Agriculture in November 2014, after the Board had finished accepting evidence in this case. The document identified the Illinois River-Senachwine Lake Watershed as one of the five priority watersheds identified in the state for sources of nitrate-nitrogen. High concentrations of nitrate-nitrogen have an adverse impact

downstream where the Mississippi River flows into the Gulf of Mexico. Emerald is located within the watershed, although the document did not identify any specific harm to the Illinois River in the area. The Nutrient Strategy also addressed agricultural BMPs offsets as one of the nutrient reduction strategies. The Board considered other factors, such as the longtime use of an adjusted standard by Emerald, in requiring an offset of at least 45%, consistent with the Nutrient Strategy's ultimate objective of reducing nitrate-nitrogen loadings by 45%. The strategy aims to reduce nitrate-nitrogen load by 15% by 2025, with eventual reduction of 45%. In discussing the five-year sunset condition, the Board stated it "firmly concludes that Emerald must begin planning to offset the nitrogen loading to the Illinois River" and described the sunset provision as a starting point.

¶ 17 Emerald appealed the conditions to the First District Appellate Court (No. 1-15-1359 (July 22, 2015)), and the case was transferred to the Third District on motion of the Board and IEPA.

¶ 18 ANALYSIS

¶ 19 The issues on appeal are whether the Board exceeded its authority and acted arbitrarily and capriciously in placing various conditions on Emerald's adjusted standard and whether it erred in considering evidence outside the record.

We begin with the question of whether the Board acted improperly in placing various conditions on the Board's adjusted standard. Emerald offers three ways in which it maintains that the Board exceeded its authority or included arbitrary and capricious conditions when it granted Emerald's petition for an adjusted standard. First, Emerald argues that the Board erred when it pre-conditioned Emerald's ability to renew or modify the adjusted standard in the future on Emerald's compliance with an unattainable agricultural BMPs offset program. Second, Emerald

challenges the requirement that Emerald include an ammonia reduction as a factor in its employee gain plan. Third, Emerald argues that the five-year sunset provision is improper.

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The Environmental Protection Act (Act) was designed to establish a program focused on the restoration, protection, and enhancement of the environment and to hold responsible those who cause adverse effects to the environment. 415 ILCS 5/2(b) (West 2012). The Act grants the Board its authority and charges it with determining, defining, and implementing environmental control standards and adopting rules and regulations to carry out its purpose. 415 ILCS 5/5(b) (West 2012). The Act is to be liberally construed in order to effectuate its purposes. 415 ILCS 5/2(c) (West 2012). The ultimate goal of the Act is to achieve compliance with applicable regulations by all polluters. *Monsanto Co. v. Pollution Control Board*, 67 Ill. 2d 276, 287 (1977). Because the Board is responsible for administering the Act, its interpretation of a regulation or statute is entitled to deference. *Central Illinois Public Service Co. v. Pollution Control Board*, 116 Ill. 2d 397, 409 (1987).

The Board has the authority to grant an adjusted standard "for persons who can justify such an adjustment consistent with subsection (a) of Section 27 of this Act" and to impose conditions as "necessary to accomplish the purpose of this Act." 415 ILCS 5/28.1(a) (West 2012). Section 27 of the Act provides the following factors for the Board to consider in determining regulations and adjusted standards: "the existing physical conditions, the character of the area involved, including the character of the surrounding land uses, zoning classifications, the nature of the existing air quality, or receiving body of water, as the case may be, and the technical feasibility and economic reasonableness of measuring or reducing the particular type of pollution." 415 ILCS 5/27(a) (West 2012).

Section 28.1 of the Act provides that where a regulation of general application does not include a level of justification that is required for a petitioner to qualify for an adjusted standard, the following factors should be used to make the determination: "(1) factors relating to that petitioner are substantially and significantly different from the factors relied upon by the Board in adopting the general regulation applicable to that petitioner; (2) the existence of those factors justifies an adjusted standard; (3) the requested standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board in adopting the rule of general applicability; and (4) the adjusted standard is consistent with any applicable federal law." 415 ILCS 5/28.1(a)(1)-(4) (West 2012).

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The Board may take notice of "matters of which the circuit courts of this State may take judicial notice" and "generally recognized technical or scientific facts within the Board's specialized knowledge [and experience]." 5 ILCS 100/10-40(c) (West 2012); 35 Ill. Adm. Code 101.630. In proceedings before the Board, the parties must be notified of the use of the extraneous evidence and afforded an opportunity to respond. 5 ILCS 100/10-40(c) (West 2012). An administrative agency may only take official notice of facts when they are disclosed and put on the record so the parties may be afforded an opportunity to be heard. *Caterpillar Tractor Co. v. Pollution Control Board*, 48 Ill. App. 3d 655, 661-62 (1977). When a conclusion in an administrative proceeding is influenced by evidence *de hors* the record, it cannot stand. *Caterpillar Tractor Co.*, 48 Ill. App. 3d at 661 (quoting *Des Plaines Currency Exchange, Inc. v. Knight*, 29 Ill. 2d 244, 247 (1963)).

This court reviews whether the Board exceeded its authority and its interpretation of a statute *de novo*. *E.O.R. Energy, LLC v. Pollution Control Board*, 2015 IL App (4th) 130443, ¶ 70; *Geneva Community Unit School District No. 304 v. Property Tax Appeal Board*, 296 Ill.

App. 3d 630, 633 (1998). We review the conditions to determine if they were arbitrary and capricious. *Monsanto Co.*, 67 Ill. 2d at 290-91.

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Emerald first challenges the condition imposed by the Board that if it wants to renew or modify the adjusted standard, Emerald must implement agricultural best management practices (BMPs) within the Illinois River-Senachwine Lake Watershed to offset at least 45% of the nitrogen in the ammonia effluent. According to Emerald, the Board is without authority to condition renewal or modification on any factors other than those set forth in sections 27(a) and 28.1 of the Act. Emerald also asserts that the condition itself was arbitrary and capricious, as it was not aligned with section 27(a) factors, would not further the purposes of the Act, and was beyond Emerald's scope of responsibility.

We agree with Emerald that the Board exceeded its authority when it conditioned renewal of the adjusted standard on Emerald's compliance with the agricultural BMPs offset requirement set forth in the condition. The Act sets forth the factors the Board is to consider when determining whether to grant an adjusted standard. The Board lacks the authority to add to or rewrite the statutory factors. *E.O.R. Energy, LLC*, 2015 IL App (4th) 130443, ¶ 69 (administrative agencies are creatures of statute and have only the powers conferred on them by their enabling statutes). While the Board may place conditions in an adjusted standard, it may not impose pre-conditions on a petitioner's right to renew or modify the adjusted standard. We consider that the offset condition improperly changes the statutory requirements and that the Board exceeded its authority in imposing it.

We further consider the condition to be arbitrary and capricious. Emerald maintains that the condition is unattainable as it was related to a regulatory program not in existence, that there was no evidence that the effluent Emerald discharges negatively impacts the environment, or that

implementation of an agricultural BMPs offset was feasible and would result in an ammonia reduction in the discharge. Importantly, there is no connection between the condition and the circumstances of the local environment in Marshall County.

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The Board did not analyze the offset requirement in accord with the statutory factors in sections 27(a) and 28.1(a) of the Act. 415 ILCS 5/27(a), 28.1(a) (West 2012). When imposing the condition, the Board was required to examine its technical feasibility and economic reasonableness. Both Emerald and IEPA questioned whether Emerald could satisfy the condition. Emerald noted it had a "negligible" ability to affect agricultural pollution, and it did not identify any BMPs to reduce nitrogen from agricultural sources. IEPA acknowledged whether Emerald would be able to find sufficient agricultural participants to offset its ammonia discharge. Based on the Board's failure to properly consider the feasibility and reasonableness of the agricultural offset BMPs requirement, we consider this condition improper.

Moreover, there is no evidence that Emerald's discharge is negatively impacting the environment. The Board decision stated that the effect of the discharge "will not result in environmental or health effects substantially or significantly more adverse than those considered by the Board in adopting the generally applicable effluent standard." In granting the adjusted standard in 2004, the Board also found there was no environmental impact from Emerald's discharge. Emerald's NPDES permit required Emerald to conduct biomonitoring of two types of aquatic species, including fish and invertebrates. The results of a 2013 toxicity study demonstrated that Emerald met toxicity levels, as noted by the Board in its instant decision. Furthermore, the quarterly monitoring showed compliance with ammonia water quality standards.

Concerns raised by IEPA regarding mollusks in the Illinois River were based on proposed standards with more stringent ammonia limits designed to protect mollusks. The stricter limits were ultimately rejected, and IEPA's concern regarding the mollusks is without support. If stricter limits were adopted in the future, Emerald's compliance would be assured through the requirements in the NPDES permit, which would reflect any changed ammonia limits. The record does not support that Emerald's effluent discharge is harming the aquatic life in the Illinois River. Emerald has and continues to meet the clean water standards. There was no evidence that the discharge was having any effect on the mollusks or other aquatic life in the river or was any more harmful to the environment than the discharge allowed in the general standard. We find the record does not support the Board's finding that the agricultural BMPs offset condition is needed to protect the environment.

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¶ 32 Emerald also maintains the Board improperly used evidence outside the record in fashioning the condition. According to Emerald, the Board's consideration of a draft of the Nutrient Strategy violated both the Board procedural rules and the Illinois Administrative Procedure Act. Emerald argues that the document was issued after the evidence portion of the proceeding concluded and that Emerald was not allowed an opportunity to be heard on and to respond to the evidence presented in the document.

We consider the use of the draft report was improper. The Board imposed on Emerald a 45% reduction requirement through agricultural BMPs offset programs. The 45% requirement parallels the ultimate reduction goal set out in the Nutrient Strategy, a document to which Emerald had no opportunity to respond or address. The Nutrient Strategy was issued after evidence was before the Board, and the first time Emerald had knowledge of it was due to its use

in the Board's decision. Basic notions of fair play necessitate that Emerald have the opportunity to explain, challenge, or refute the facts on which the Board based this condition.

In addition, the Nutrient Strategy does not support the imposition of the condition. At oral argument, the discussion revealed that the draft strategy was directed at mitigating dissolved oxygen or nutrient problems occurring where the Mississippi River discharges into the Gulf of Mexico. The ammonia regulations were implemented to counter dissolved oxygen sags in the Illinois River. Later studies determined that the sags were primarily caused by nonpoint agricultural sources and not as a result of the ammonia effluent discharged by Emerald. The Illinois River does not include any sections that are listed as impaired as to ammonia or dissolved oxygen. Because the Draft Strategy was the basis for implementing it and the evidence does not support it, we find the condition cannot stand.

Next, Emerald argues that the Board exceeded its authority when it conditioned the adjusted standard on Emerald continuing to incorporate "ammonia reduction as a metric in the employee gain sharing plan." Emerald asserts the Board's action is unprecedented and that the inclusion of the employee bonus plan in an adjusted standard is beyond the sphere of environmental protection. We agree.

The Act grants the Board the authority to fashion regulations to effectuate the Act's purpose of protecting the environment. We cannot find that the inclusion of the plan as a condition in the adjusted standard advances that purpose. There was no evidence that inclusion of ammonia reduction as a metric in the plan resulted in any reduction of ammonia. There was no information at all about the plan, its requirements, or employee participation in it other than a single statement in a 2010 report Emerald submitted to IEPA. In the report, Emerald stated that a

key project with "the potential to reduce ammonia generation at the wastewater plant" was the continued use of ammonia reduction as a measurement in its gain sharing program."

The Board has latitude in the means it imposes to satisfy the Act's objectives; however, the means must be connected in some fashion to the condition. Here, there is no evidence to support a connection between the gain sharing plan and the goal of ammonia reduction. This condition is inconsistent with the purposes of the Act. We find the Board exceeded its authority when it included the gain share plan as a condition in the adjusted standard and that its use as a condition was arbitrary and capricious as it was not supported by any evidence.

Our last consideration is the five-year sunset provision. Emerald complains that the Board erred when it placed a five-year sunset provision as a condition. It submits that adjusted standards were meant to be indefinite in duration and not time-bound like variances.

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Emerald attempts to draw a distinction between a variance and an adjusted standard, claiming that a reasonable interpretation of the statute informs that a variance is intended to be a temporary form of relief, while the relief afforded under an adjusted standard is permanent or indefinite in duration. 415 ILCS 5/35, 36(b) (West 2012); *Environmental Protection Agency v. Pollution Control Board*, 308 Ill. App. 3d 741, 748-49 (1999). Emerald's assertion fails. A variance anticipates compliance at the end of the variance period. For that reason, the variance is limited to five years and cannot be renewed. In contrast, an adjusted standard allows the petitioner to exceed the general standard indefinitely, pursuant to the terms of the adjusted standard, which may include conditions, including a sunset provision.

The five-year sunset imposed here is not arbitrary and capricious, as Emerald maintains.

An agency acts arbitrarily and capriciously if it relies on factors outside those the legislature intended for consideration; completely fails to consider an significant aspect of the problem; or

provides an explanation to its decision that is so implausible or contrary to the evidence that it could not be based on agency expertise or result from a difference in view. *Environmental Protection Agency*, 308 Ill. App. 3d at 751.

Emerald or its predecessors have been discharging effluent that exceeds the allowable amount of pollution into the Illinois River for decades. The five-year sunset provision encourages Emerald to aggressively pursue means to reduce the amount of ammonia it discharges into the Illinois River or institute alternative means to alleviate the pollution. As technology advances and environmental concerns remain paramount, the five-year period allows Emerald to apply any advances to its operations in a continued attempt to reach compliance with the ammonia standard. The Board is charged with the authority to obtain compliance with the environmental standards, and a sunset provision is a viable means to achieve compliance and not contrary to the legislative purpose of the Act. The provision was imposed after the Board considered all aspects of Emerald's inability to comply with the ammonia standard. The Board imposed a sunset provision on the last adjusted standard it issued to the Henry plant. Emerald responded to the Board that it would accept a sunset provision here, rather than a denial of an adjusted standard. The five-year sunset provision is appropriate and a valid means to inspire Emerald to attempt to comply with the pollution regulations. We find there was no error in a five-year sunset provision as a condition in the adjusted standard.

¶ 42 CONCLUSION

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- ¶ 43 For the foregoing reasons, the judgment of the Pollution Control Board is affirmed in part, reversed in part, and the cause remanded.
- ¶ 44 Affirmed in part, reversed in part, and remanded.